GOVERNMENT OF INDIA

India METEOROLOGICAL DEPARTMENT

INDIA WEATHER REVIEW, 1950

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Published by the Authority of the Government of India

Under the Direction of

S. Basu, M.Sc., F.N.I.

Director General of Observatories

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1959

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INDIA WEATHER REVIEW, 1950

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INTRODUCTION

CONTENTS

	Pages
Introduction	i—vii

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INDIA WEATHER REVIEW, 1950

INTRODUCTION

The India Weather Review is composed of the twelve Monthly Weather Reports and the Annual Summary.

Monthly Weather Report

Up to 1932, the Monthly Weather Report contained only the means of 8 hrs. L. M. T. observations based upon the figures telegraphed for the Indian Daily Weather Report. The need for an afternoon weather chart for the preparation of forecasts for aviators led to most of the observatories in northern and central India being raised to class II by the end of 1930. It was then considered desirable to include the afternoon observations of these observatories in the Monthly Weather Report and base the means on the scrutinised data from the Monthly Meteorological Registers. When the arrangements for scrutinising were completed, the Monthly Weather Report was expanded in January 1933 to contain the afternoon observations as well as the observations at Climatological stations which send their observations by post. The remaining observatories in the Peninsula were raised to class II in April 1937 and from 1938 the afternoon observations from these observatories are also published in the Monthly Weather Report. As a result of the constitutional changes in August 1947, the data of Pakistan stations have not been included in the Monthly Weather Reports from August 1947.

From 1933 each Monthly Weather Report gives a short account of the weather of the month and had till 1947 tables I to V. On the omission of the data of stations in South Baluchistan, Iran and Arabia contained in table III from the Monthly Weather Report for August 1947, it now contains only tables I to IV as mentioned below:-

Table I.—Divisional and sub-divisional means.

Table II.—Monthly means of observations at 0830 hrs. I.S.T. and 1730 hrs. I.S.T. at Indian Stations.

Table III.—Monthly means of observations at 0830 hrs. I.S.T. at class IV stations.

Table IV.—Data of class V stations.

With the discontinuance of the Upper Air Data Part A, from 1946, the Monthly Weather Report was expanded in 1947 to include two additional tables A and B giving monthly mean directions and velocities of upper winds at heights up to 9·0 km. and above. From January 1948, two plates giving monthly mean constant pressure charts for 1000 and 850 mbs. and for 700 and 500 mbs. levels have also been added to the Monthly Weather Report.

Annual Summary

Between 1933 and 1937 the Annual Summary was published in five parts. From the issue for 1938 it is published in four parts as detailed below. The fifth part comprising the "Seismic Records" which was being published in the form of a quarterly bulletin called the "Seismological Bulletin" has been discontinued from the issue for January-March 1946 and is now being issued separately, as a monthly. Data of stations in Pakistan, Iran and Arabia were omitted from 1947.

I. Introduction.—Title page; table of contents; introduction including an alphabetical list of observatories, a list of stations equipped with autographic instruments and errata to Monthly Weather Reports and Annual Summary.

II. Part A.—Summary of weather and rainfall and tables of meteorological data. This gives a general description of the weather of the year, and contains annual tables corresponding to the monthly tables in the Monthly Weather Reports monthly and annual tables for a few stations and special tables of nocturnal radiation temperature, sunshine data, hourly wind velocity and rainfall. From the year 1948 hourly data of pressure, rainfall, temperature and humidity and frequency tables of these elements for stations equipped with autograpnic instruments have also been included. Besides, three plates A1, A2, A3 showing the monthly and seasonal distribution of rainfall and monthly departures of pressure are given at the end.

III. Part B.—Snowfall. This gives a summary of the snowfall reports pertaining to the mountain regions in the north of India.

IV. Part C.— Storms and depressions. This describes all storms and depressions. and contains notes on western disturbances and local storms and charts of storm tracks.

The following notes concerning the observatories, the instruments in use and their conditions of exposure, the methods of observation and reduction and grouping of results will be of some help to users of this volume.

Observing stations.—An alphabetical list of stations, the data of which are included in the Monthly Weather Reports or in Tables I to XIII of the Annual Summary, Part A, is given in the table below. The class to which the station belongs, the geographical co-ordinates (φ, λ), the heights of the barometer cistern (Hb) above M.S.L. and of the anemometer above the ground (ha) are also given against each station.

The scheme of classification of observatories adopted in this department is explained below.

Class I.— Observatories taking three or more sets of observations per day at fixed times, and having autographic instruments for recording at least pressure, temperature, wind speed and direction.

Class II.— Observatories taking two sets of observations per day.

Class III.— Observatories taking one set of observations per day.

Class IV.— Observatories not equipped with barometers but taking either two or one set of all the remaining observations per day.

Class V.— Observatories taking instrumental observations of rainfall only.

The three hours of observation adopted at Indian stations were 8 hrs. I.S.T., 12-30 hrs. I.S.T. and 17 hrs. I.S.T. At stations where only a single observation was recorded, *viz.*, Class III, IV and V observatories, the observations were recorded at the morning hour only. At Class II stations, observations recorded at 8 hrs. I.S.T. and 17 hrs. I.S.T. whereas at class I stations observations were recorded at 12-30 hrs. I.S.T. also. The time of observations were changed from the 1st March 1949 as follows:—

(*i*) 0530 hrs. I.S.T. observation was introduced at fulltime observer stations.

(*ii*) The times of the main synoptic observations were changed from 0800 and 1700 hrs. I.S.T. to 0830 and 1730 hrs. I.S.T. respectively.

(*iii*) 1130 hrs. I.S.T. observation was introduced at some of the observatories.

(*iv*) 2330 hrs. I.S.T. observation was introduced at all fulltime observer stations and at restricted part-time stations.

(*v*) 1230 hrs. I.S.T. observation was discontinued from the 1st June 1949.

The Indian Standard Time (I.S.T.) corresponds to the longitude of 82° 30′ E and is therefore 5 hrs. 30 mins. in advance of the Greenwich Mean Time.

At all observatories of this department, 4 ft. above ground level has been adopted as the standard height for the bottom of the Stevenson Screen, so that the bulbs of the dry and wet bulb thermometers are at a height of 4½ to 4⅝ ft. above ground. A standard height of 1 ft. above ground has been adopted for the rim of the funnel of the raingauge.

As the wind vane is generally fixed at about the same height as the anemometer, its height is not separately given.

Alphabetical List of Stations

Station	Class	φ	λ	H_b	h_a
		° ′ N	° ′ E	ft.	ft.
Abu	II	24 36	72 43	3,945	63
Agra	II	27 10	78 02	553	39
Ahmedabad *	I	23 02	72 35	181	51
Ahmednagar	II	19 05	74 55	2,154	39
Aijal	II	23 44	92 43	3,599	26
Ajmer	II	26 27	74 37	1,593	45
Akola	II	20 42	77 02	925	43
Alibag	III	18 38	72 52	23	74
Aligarh	II	27 58	78 04	615	45
Allahabad (Bamrauli)	I	25 27	81 44	322	19
Alleppey	II	09 33	76 25	12	37
Ambala	II	30 23	76 46	892	41
Amini Devi	III	11 07	72 44	13	27
Amravati	II	20 56	77 47	1,213	26
Amritsar	II	31 38	74 52	769	47
Anantapur	II	14 41	77 37	1,148	49
Angul	II	20 50	85 06	455	25
Arogyavaram	II	13 32	78 30	2,299	35
Arrah	V	25 34	84 40	..	..
Asansol	II	23 41	86 59	414	33
Aurangabad	II	19 53	75 20	1,905	35
Azamgarh	II	26 03	83 13	255	31
Bahraich	II	27 34	81 36	407	37
Balasore	II	21 30	86 56	65	26
Balchonnur	IV	13 22	75 27	..	..
Banaras	II	25 18	83 01	250	81
Bandar	II	25 28	80 22	398	35
Bangalore	I	12 58	77 35	3,021	55
Bankura	V	23 14	87 04	..	..
Bareilly	II	28 22	79 24	568	41
Barmer	II	25 45	71 23	638	22
Baroda	I	22 18	73 15	115	42
Belgaum	II	15 51	74 31	2,562	42
Bellary	II	15 09	76 51	1,473	30
Berhampore	II	24 08	88 16	62	25
Betul	II	20 52	77 56	2,144	32
Bhavnagar	II	21 45	72 12	55	27
Bhopal †	II	23 16	77 25	1,643	32
Bhopal (Bairagarh)	II	23 17	77 21	1,714	37
Bhuj	II	23 15	69 48	343	30
Bidar	II	17 55	77 32	2,178	36
Bijapur	II	16 49	75 43	1,950	35
Bikaner	II	28 00	73 18	734	34
Bombay	I	18 54	72 49	35	58
Buldhana	II	20 32	76 14	2,133	30
Burdwan	II	23 14	87 51	106	53
Calcutta (Alipore)	I	22 32	88 20	21	56
Calingapatam	II	18 20	84 08	19	33
Chaibasa	II	22 33	85 49	742	28
Champa	II	22 02	82 42	805	52
Chanda	II	19 58	79 18	634	17
Chandbali	II	20 47	86 44	20	32
Chapra	V	25 47	84 44	..	..
Cherrapunji	II	25 15	91 44	4,309	38
Chhindwara	II	22 06	79 00	2,248	34
Chitaldrug	II	14 14	76 26	2,405	26
Chungthang	V	27 36	88 30	..	..
Coimbatore	II	11 00	76 58	1,341	44
Colombo	I	06 54	79 52	24	19
Contai	II	21 47	87 45	35	26
Cooch Behar	II	26 20	89 27	145	34
Coonoor	III	11 21	76 48	5,730	26
Cuddalore	II	11 46	79 46	39	56
Cuddapah	II	14 29	78 50	428	30
Cuttack	II	20 48	85 56	87	37
Dahanu	II	19 58	72 43	15	35
Dalhousie	V	33 22	75 58	..	..
Daltonganj	II	24 03	84 04	725	29
Darbhanga	II	26 10	85 54	161	28
Darjiling	II	27 03	88 16	7,432	18
Deesa	II	24 14	72 12	466	62
Dehra Dun	II	30 19	78 02	2,239	36
Dehri	II	24 55	84 11	352	26
Deolali	III	19 53	73 49	1,874	10
Devgad	II	16 23	73 21	117	25
Dhanbad	III	23 47	86 26	839	50
Dharampore	V	30 54	77 01	..	..
Dhubri	II	26 01	89 59	115	32
Dibrugarh	II	27 28	94 55	348	25
Dohad	II	22 50	74 16	1,093	39
Dum Dum	II	22 39	88 27	33	50
Dumka	II	24 16	87 15	489	26

* Converted to Class I from October, 1950.

† Closed from 1st November, 1950.

Station	Class	φ	λ	Hb	ha
		° ′ N	° ′ E	ft.	ft.
Dwarka	II	22 22	69 05	37	19
Fatehpur	II	25 56	80 50	375	39
Ferozepore	II	30 55	74 40	657	25
Fort Cochin	II	09 58	76 14	10	32
Gadag	II	15 25	75 38	2,131	33
Gauhati	II	26 11	91 45	182	28
Gaya	II	24 45	84 57	365	19
Gilgit	II	35 55	74 23	4,890	25
Gonda	II	27 08	81 58	360	32
Gondia	II	21 28	80 12	1,026	31
Gondla	V	32 31	77 02	..	..
Gopalpur	II	19 16	84 53	56	25
Gorakhpur	II	26 45	83 22	254	31
Gulbarga	II	17 21	76 51	1,503	37
Gulmarg	III	34 03	74 44	8,709	20
Guna	II	24 39	77 19	1,571	23
Gurez	V	34 38	74 51	..	..
Gwalior	II	26 14	78 15	681	6
Gyantse	III	28 56	89 36	13,110	27
Hambantota	II	06 07	81 08	61	11
Hanamkonda	II	18 01	79 34	881	38
Harnai	II	17 49	73 06	66	5
Hassan	II	13 00	76 09	3,149	41
Hazaribagh	II	23 59	85 22	2,006	63
Hissar	II	29 10	75 44	725	42
Honavar	II	14 17	74 27	85	31
Hoshangabad	II	22 46	77 46	992	35
Hyderabad (Begumpet)	II	17 28	78 27	1,787	49
Indore	II	22 43	75 48	1,839	8
Jabalpur	II	23 10	79 57	1,289	36
Jagdalpur	II	19 05	82 02	1,815	35
Jaipur	I	26 55	75 50	1,431	61
Jaisalmer	II	26 54	70 55	793	34
Jalgaon	II	21 03	75 34	660	10
Jalpaiguri	II	26 32	88 43	271	32
Jammu	IV	32 44	74 55	..	..
Jamnagar	II	22 29	70 04	60	39
Jamshedpur	II	22 49	86 11	423	50
Jamuna Chatty	V	30 53	78 20	..	..
Jhalawar	II	24 32	76 10	1,053	28
Jhansi	II	25 27	78 35	823	37
Jharsuguda	II	21 55	84 05	726	..
Jodhpur	I	26 18	73 01	736	20
Kakinada	II	16 57	82 14	26	27
Kalimpong	II	27 04	88 28	3,965	22
Kallakurichi	II	11 44	78 58	416	..

Station	Class	φ	λ	H_b	h_a
		° ′ N	° ′ E	ft.	ft.
Kanker	II	20 16	81 29	1,318	40
Kanpur	II	26 26	80 22	414	44
Karnal	II	29 42	77 02	818	36
Katmandu	II	27 42	85 12	4,388	24
Khammameth	II	17 15	80 09	367	29
Khandala	V	18 46	73 22	..	..
Khandwa	II	21 50	76 22	1,044	21
Kharsali	V	30 58	78 26	..	..
Kodaikanal	I	10 14	77 28	7,688	42
Koksar	V	32 25	77 14	..	..
Kolhapur	II	16 42	74 14	1,885	35
Kotah	II	25 11	75 51	843	31
Kothi	V	32 19	77 12	..	..
Kozhikode	II	11 15	75 47	27	43
Krishnagar	II	23 24	88 31	48	45
Kurnool	II	15 50	78 04	923	49
Kyelang	V	32 35	77 04	..	..
Lachen	IV	27 43	88 32	..	..
Lachung	V	27 42	88 45	..	..
Leh	II	34 09	77 34	11,529	25
Lhasa	III	29 40	91 07	12,090	31
Lucknow	II	26 52	80 56	371	31
Ludhiana	II	30 56	75 52	810	30
Lumding	IV	25 45	93 11	..	..
Madhosagar	II	26 13	78 00	757	23
Madras (Meenambakkam)	I	13 04	80 11	51	45
Mahabaleshwar	II	17 56	73 40	4,534	28
Mainpuri	II	27 14	79 03	516	28
Malda	II	25 02	88 08	103	51
Malegaon	II	20 33	74 32	1,432	25
Mangalore	I	12 52	74 51	72	54
Mannar	II	08 59	79 55	12	14
Marmagao	II	15 25	73 47	202	25
Masulipatam	II	16 11	81 08	10	35
Mathurai	II	09 55	78 07	437	38
Mawsynram	V	25 18	91 35	..	..
Meerut	III	29 01	77 43	728	47
Mercara	II	12 25	75 44	3,781	18
Midnapore	II	22 25	87 19	149	28
Minicoy	II	08 18	73 00	6	48
Miraj	II	16 49	74 41	1,817	32
Misgar	II	36 47	74 46	10,190	21
Motihari	II	26 40	84 55	218	30
Muktesar (Kumaon)	II	29 28	79 39	7,582	14
Mussooree	II	30 27	78 05	6,699	25
Muzaffarpur	V	26 07	85 24	..	..

Station	Class	φ	λ	H_b	h_a
		° ′ N	° ′ E	ft.	ft.
Mysore	II	12 18	76 42	2,518	73
Nagapattinam	II	10 46	79 51	31	39
Nagercoil	II	08 10	77 27	195	32
Nagpur	II	21 09	79 07	1,010	9
Neemuch	II	24 28	74 54	1,626	42
Nellore	II	14 27	79 59	66	45
New Delhi	I	28 35	77 12	710	53
Nizamabad	II	18 40	78 06	1,250	47
Nowgong	II	25 04	79 27	750	28
Ongole	II	15 34	80 03	38	31
Ootacamund	II	11 24	76 44	7,364	27
Pachmarhi	II	22 28	78 26	3,528	37
Palayamcottai*	II	08 44	77 45	167	48
Palghat	II	10 46	76 39	319	23
Pamban	II	09 16	79 18	37	26
Parbhani	II	19 08	76 50	1,393	—
Patiala	II	30 20	76 28	822	60
Patna	II	25 37	85 10	173	51
Pendra	II	22 46	81 54	2,040	20
Phalodi	II	27 08	72 22	794	41
Poona	I	18 32	73 51	1,834	24
Port Blair	II	11 40	92 43	259	27
Puri	II	19 48	85 49	20	29
Purnea	II	25 46	87 28	124	25
Purulia	II	23 20	86 25	835	23
Raichur	II	16 12	77 21	1,311	41
Raipur	II	21 14	81 39	979	28
Rajkot	II	22 18	70 50	432	30
Ramagundam	II	18 46	79 26	527	17
Rana	V	30 55	78 23	..	..
Ranchi	II	23 23	85 20	2,150	44
Ratlam	II	23 19	75 03	1,596	46
Rentachintala	II	16 33	79 33	348	27
Roorkee	II	29 51	77 53	899	37
Sabour	II	25 14	87 04	122	24
Sagar	II	23 51	78 45	1,808	6
Saharsa†	II	25 52	86 37	156	19
Salem	II	11 39	78 10	913	54
Sambalpur	II	21 28	83 58	486	31
Sandheads	II	20 51	88 15	32	..
Saugor Island	II	21 39	88 03	10	52
Sconi	II	22 05	79 33	2,027	31
Seychelles	II	04 37	55 27	15	37
Shillong	II	25 34	91 53	4,921	28
Sholapur	II	17 40	75 54	1,570	30
Sibsagar	II	26 59	94 38	317	20
Sikar	II	27 37	75 08	1,419	41
Silchar	II	24 49	92 48	96	24
Simla	II	31 06	77 10	7,224	86
Skardu	II	35 18	75 37	7,505	17
Sonamarg	V	34 19	75 19	..	..
Sri Ganganagar	II	29 55	73 53	580	26
Srinagar	I	34 05	74 50	5,205	60
Surat	II	21 12	72 50	39	64
Sutna	II	24 34	80 50	1,041	34
Tezpur	II	26 37	92 47	258	30
Tiruchirapalli	II	10 49	78 43	295	34
Titilagarh	II	20 18	83 18	691	29
Thangu	V	27 53	88 31	..	..
Trincomalee	II	08 35	81 15	24	15
Trivandrum	I	08 29	76 57	211	41
Tura	II	25 31	90 14	1,215	29
Udaipur	II	24 35	73 42	1,910	19
Umaria	II	23 32	80 53	1,506	34
Vellore	II	12 55	79 09	703	21
Vengurla	II	15 52	73 38	29	..
Veraval	II	20 54	70 22	26	34
Visakhapatnam	II	17 42	83 18	126	43
Yatung (Chumbi)	IV	27 29	88 55	..	..
Yeotmal	II	20 24	78 09	1,481	33

* Converted to class II from November, 1950.
† Closed on 19th May, 1950.

Territorial Divisions.—The system of territorial divisions according to which the observatories are grouped is given below. The numbers of observatories in each of the sub-divisions is given in brackets against the sub-division.

Chief Political Divisions	Sub-divisions
	Bay Islands (1).
Assam (including Manipur and Tripura)	Assam (including Manipur and Tripura) (12).
West Bengal	West Bengal (16).
Orissa	Orissa (9).
Bihar	Chota-Nagpur (7). Bihar (11)
Uttar Pradesh	Uttar Pradesh, East (10). Uttar Pradesh, West (10).
Punjab (I) (including PEPSU and Delhi)	Punjab (I) (including PEPSU and Delhi) (18). Jammu and Kashmir (11).
Rajasthan	Rajasthan, West (6). Rajasthan, East (including Ajmer) (6).
Madhya Bharat and Vindhya Pradesh	Madhya Bharat (7). Vindhya Pradesh (3).
Madhya Pradesh	Madhya Pradesh, East (7). Madhya Pradesh, West (13).

Chief Political Divisions	Sub-divisions
Bombay (including Saurashtra and Kutch)	Gujarat (5). Saurashtra and Kutch (7). Konkan (8). Deccan (Desh) (13).
Hyderabad	Hyderabad, North (5). Hyderabad, South (5). Coastal Andhradesa (7).
Madras (including Travancore-Cochin)	Rayalaseema (4). Tamilnad (13). Malabar and South Kanara (3). Travancore-Cochin (4).
Mysore	Mysore (6).

Barometric pressure.—Till 1932 mercurial barometers of the Fortin type with tubes of 0·4″ uniform bore were in use at most of the observing stations in India; but since that year, Kew pattern Barometers, made according to departmental specifications, have gradually been introduced at all the plain stations. The Kew pattern Barometers were also introduced at two hill stations, Kodaikanal and Mahabaleshwar, during 1946 and 1947 respectively. Fortin Barometers continue to be used at other hill stations.

An aneroid barometer was in use at Lhasa.

The standard for the measurement of atmospheric pressure in India is the "Calcutta Standard". On the results of all comparisons made till 1935, the corrections at present accepted of the "Calcutta Standard" with respect to Kew is-0·009″.

Standard Barometers are now maintained at Poona, Bombay, Delhi, Nagpur, Calcutta and Madras for the purpose of standardising barometers before they are issued to land stations. Marine barometers for issue to ships are standardised at Bombay, Calcutta and Madras. These working standards are all corrected with respect to the "Calcutta Standard". The correction of all the barometers issued by this department is therefore ultimately based on the "Calcutta Standard".

The main work of the determination of the corrections of the barometers issued to outstations is done at Poona.

The barometers at all observatories are situated in masonry buildings to protect them as much as possible from rapid changes of temperature.

The heights above mean sea level of the barometers are given in all the tables of pressure as well as in the alphabetical list of stations. Heights of most stations have been obtained accurately by actual measurement from datum levels determined by the Great Trigonometrical Survey of India; the heights of only a few stations, mostly in Kashmir, have been determined barometrically.

Temperature.— Till 1923, thermometers were exposed in large open sided sheds to protect them from extraneous radiation (*vide* Annual Report on the Meteorology of India, 1887, p. 37). As a result of experiments carried out at Agra on various types of exposures and described in the Ind. Met. Mem. Vol. XXIV, Part III (1922), all of these have been replaced by Stevenson Screens, which are less costly and cheaper to maintain.

The screen adopted for use in India has free inside measurements of 22″ length, 12″ depth and 16″ height and is somewhat larger than the pattern approved in 1884 by the Thermometer Screen Committee of the English Meteorological Society and larger too than the "small model" in common use in Germany. It is made of teak wood painted white and has four double louvred sides with a double roof, the lower one having perforations. The upper roof slopes from front to back and protects the top from Sun and rain. The door on the north side has 14 louvres and the remaining sides have 16 louvres each.

Thermometers in use which were issued up to the end of 1931 were verified by comparison with Kew standard thermometers at Calcutta. Instruments issued from 1932 were compared at Poona with standards provided with certificates of correction from the National Physical Laboratory, Teddington, England. All the thermometers at the observing stations are re-standardised from time to time; the temperatures given in the tables are corrected values.

Up to 1947 both the maximum and minimum thermometers were set and read only once in a day at the time of the morning observations. But from 1948, the minimum thermometer is set in the morning as well as in the evening and the readings of both the maximum temperatures are taken twice a day at the time of morning and evening observations. The maximum and minimum temperatures published in the reports refer to a period of 24 hours ending at 0830 hrs.I.S.T. The monthly means of these temperatures refer to the month ending at 0830 hrs. on the last day of the month.

Terrestrial radiation.— New terrestrial radiation thermometers were brought into use at most of the departmental first class observatories in 1932 and the method of exposure was also altered. Formerly these thermometers were laid on a thick pad of woollen blanket; but since 1932 they are placed on two wooden forks on a close cropped grass plot so that the bulb of the thermometer is about 1½″ above ground. The radiation minimum temperatures recorded by these thermometers at 12 stations appear in Table VIA, in which the depression of these temperatures below the minimum temperature in shade at 4 feet above ground is also given.

Hours of bright sunshine.—Sunshine recorders of the standard Campbell-Stokes pattern were in use at 14 stations.

Surface Winds.—Previous to 1930, Robinson four-cup anemometers of the dial pattern were in use at Indian Observatories. Since 1930, however, the department gradually introduced counter type anemometers manufactured at the departmental workshop at Poona and these are in use at almost all the observatories.

All anemometers issued up to the end of 1931 were compared before issue with the standard Beckley anemograph at the Alipore Observatory. Up to 1911 the factor representing the ratio of air movement to travel of Beckley cups had been taken in India as in other countries, as 3·0; but from that year the generally accepted factor of 2·2 has been used (*see* note on page 8, Monthly Weather Review, January 1912). Since January 1932 anemometers are issued from Poona after comparison with the standard cup anemometer there. This standard is provided with a certificate of corrections from Wind Channel tests, made at the National Physical Laboratory, Teddington, England, and has also been compared with the Beckley anemograph at Alipore. However, as only instruments with small corrections are issued and as it is impracticable entirely to prevent slight alterations in exposure resulting from growth of trees or erection of buildings, it has been considered unnecessary to apply any correction to the observed value.

The wind data published consist of the mean hourly air movement as registered by counter type anemometers during the 24 hours ending at the time of morning observations and the frequency of the wind direction from 8 compass points at both the hours of observation.

Humidity and Cloud.—The hygrometric data are calculated by means of the departmental Hygrometric tables. The proportion of cloud was estimated in tenths of the sky expanse, an overcast sky being denoted by 10 and a cloudless sky by 0. From 1949 the cloud amount is expressed in oktas of the total sky, an overcast sky being recorded as 8 and cloudless sky as 0.

Rainfall.—Symons raingauges with funnels of 5″ diameter are now used at all raingauge stations, with the exception of those in Mysore and Travancore where raingauges of local

make having funnels of 4·7″ diameter are in general use. At all the departmental raingauge stations new rain-measuring glasses made according to specifications drawn up by this department and tested at Poona have been introduced. The time of measuring rainfall at all the departmental observatories was 0800 hrs. I. S. T. and at the state raingauge stations 0800 hrs. L.M.T. The time of observations of rainfall at the departmental observatories and at the state raingauge stations has been changed to 0830 hrs I. S. T. from March 1949 and January 1950 respectively. The amounts measured at these hours give the rainfall of the previous 24 hours.

The rainfall data of state raingauge stations for each state are generally tabulated in the office of the state officers controlling registration of rainfall in the state, and published in the state gazettes. The data of Rajasthan and Madhya Bharat, Vindhya Pradesh and Bhopal are, however, published by the Meteorological Office, Poona. These provincial tables are collected together and are issued annually in a separate volume entitled "Rainfall of India". These data are utilised in preparing Table XIV to XVIII in part A. In these provincial tables and in the rainfall observations at the meteorological observatories published in this volume a "rainy day" is taken to be one on which 0·10″ or more of rain is recorded.

Autographic instruments.— In addition to the eye reading instruments, autographic instruments are maintained at all class I stations and a few other observatories.

The following is a complete list of such stations with the instruments available noted against them. The symbols adopted to denote different instruments are shown below.

W—Anemograph T—Thermograph
B—Barograph R—Self-recording Raingauge.
U—Hygrograph S—Sunshine Recorder

Station	Autographic Instruments					
1. Alibag		B		T	R	
2. Aligarh		B	U	T	R	
3. Allahabad (Bamrauli)	W	B	U	T	R	S
4. Bangalore	W	B	U	T	R	S
5. Barmer		B		T		
6. Baroda	W	B	U	T	R	S
7. Bhopal		B	U*	T		
8. Bombay (Colaba)	W	B	U	T	R	S
9. Bombay (Juhu)	W	B		T	R	
10. Calcutta (Alipore)	W	B	U	T	R	S
11. Calcutta (Dum Dum)	W	B	U	T	R	
12. Cherrapunji					R	
13. Cochin	W	B				
14. Gaya	W	B		T	R	
15. Gopalpur	W	B				
16. Hyderabad (Begumpet)	W	B			R	
17. Jaipur	W	B	U	T	R	S
18. Jamshedpur	W	B		T	R	
19. Jodhpur	W	B	U	T	R	S
20. Kakinada		B				
21. Kodaikanal	W	B	U	T	R	S
22. Lucknow		B				
23. Madras (Meenambakkam)		B	U	T	R	S
24. Madras (Nungambakkam)	W	B	U	T		
25. Madras (Port Trust)	W					
26. Mahabaleshwar					R	
27. Mangalore		B				
28. Masulipatam		B				
29. Nagpur	W	B	U	T	R	S
30. Negapatam		B				
31. New Delhi	W	B	U	T	R	S
32. Pamban		B				
33. Poona	W	B	U	T	R	S
34. Puri		B				
35. Sandheads		B				
36. Saugor Island	W	B		T	R	
37. Seychelles		B			R	
38. Srinagar		B		T		S
39. Tezpur	W			T		
40. Trivandrum	W	B		T	R	S
41. Veraval		B				
42. Visakhapatnam	W	B	U	T	R	

*Thermohygrograph.

Tables.—Tables I, II, IV and V in the Annual Summary Part A, contain the annual means of Indian stations whose monthly data have appeared in the Monthly Weather Reports.

Table III is similar to Table II and contains the monthly and annual means of those Indian stations which could not be included in the Monthly Weather Reports.

Table VI gives the mean duration of bright sunshine and VI-A the abstract of hours of bright sunshine and nocturnal radation temperature at 14 stations.

Table VII gives the mean hourly and extreme pressure at 22 stations.

Tables VII to VIII-I give the total hourly rainfall, maximum in one hour and frequency of rainfall amounts in one hour to six-hour periods and in one-day to three consecutive days at 21 stations.

Tables VIII-J and VIII-K give the frequency of rainfall in one hour and in five minutes respectively (intensity greater than $\frac{1}{2}$″ per hour) at 21 stations.

Table IX gives the mean hourly and extreme wind velocities at 19 stations. Owing to a change in the method of tabulation of the anemographs from 1st January 1939, the velocity given against any hour is the average for the ten minutes immediately preceding that hour.

Table IX-A gives the frequencies of the number of hours when wind speed was wtihin specified limits at the above 19 stations.

Table IX-B gives a statement of squalls occurred at 14 first class observatories.

Table X gives the mean hourly and extreme dry bulb temperature at 18 stations.

Tables X-A to X-C give the frequency of number of hours when dry bulb temperature, maximum temperature and minimum temperature were within specified limits at 18, 19 and 19 stations respectively.

Tables XI and XI-A give the mean hourly and extreme wet bulb temperature and the frequency of the number of days when maximum wet bulb temperature was within specified limits at 11 and 12 stations respectively.

Table XII gives the mean hourly and extreme relative humidity at 15 stations.

Table XIII gives the number of days on which the Nilgiris were visible from Kodaikanal.

Tables XIV to XVIII give the divisional and sub-divisional means of rainfall and the number of rainy days derived from the records of about 3,000 rainfall recording stations and table XIX gives heavy falls of 10" and above in 24 hours at these stations.

Normals.— The normals used for comparison in Tables I to V and XIV to XVIII are generally based on data up to 1940.

In Table VI-A the normals of radiation minimum temperature and of its depression below the shade minimum temperature are based on all available data up to the year 1930.

The data of stations under the administrative control of the Regional Meteorological Centres at Calcutta, New Delhi, Nagpur, Bombay and Madras are scrutinised and supplied by the respective centres.

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INDIA WEATHER REVIEW, 1950

MONTHLY WEATHER REPORT

JANUARY

Published by authority of the Government of India

CHIEF FEATURES :— (i) Excess of rainfall in the Uttar Pradesh, the Punjab(I) and Western Pakistan during the second half of the month caused by active western disturbances. (ii) Practically dry weather elsewhere over the country.

Eight western disturbances affected the weather during January. The western disturbances in the first half of the month were generally feeble and caused only scattered showers in Baluchistan, the North-West Frontier Province, Kashmir and the hills of Punjab (I). Weather was dry elsewhere over the country during this period. The disturbances during the second half of the month were active. They followed in quick succession and gave spells of good rain or snow in western Pakistan, the Punjab (I) and the Uttar Pradesh. There were locally heavy falls of rain in the hills of the Punjab (I) on the 20th. In association with the sixth western disturbance, there were also fairly widespread thundershowers in Vindhya Pradesh and Bihar on the 26th and 27th. The details of the western disturbances are set out in the following table :

TABLE

S. No.	Period	Course	Region	Nature of Precipitation	Period	Remarks
1	31st Dec. to 2nd January	North Baluchistan to Punjab (I) hills.	Hills of Punjab (I) and of west Uttar Pradesh	Widespread rain	2nd	Surge of cold air behind the disturbance caused drop in temperature of 10° to 15°F. in Western Pakistan, northwest India, Uttar Pradesh and Madhya Bharat
			North-West Frontier Province, Kashmir	Scattered showers	1st & 2nd	
2	8th & 9th	Extreme north of the country	Kashmir	Scattered showers	8th & 9th	
3	11th to 13th	Baluchistan to Punjab (I)	...	No precipitation		
3(a)	13th to 15th	Sind to Assam	Punjab (I)	Scattered falls in hills	14th & 15th	Formed as secondary over Sind
4	15th to 17th	Baluchistan to the hills of the Punjab (I)	Baluchistan, North-West Frontier Province, north Punjab (P)	Scattered showers	16th & 17th	
5	17th to 20th	Baluchistan to the hills of west Uttar Pradesh.	Baluchistan, North-West Frontier Province, Kashmir, Punjab (P)	Fairly widespread rain or snow	18th & 19th	Active. Induced a secondary over Sind
			Punjab (P)	Local showers	20th	
			Punjab (I)	Fairly widespread rain or snow with locally heavy falls	19th & 20th	
			In and near hills of west Uttar Pradesh	Fairly widespread rain or snow	20th & 21st	
5(a)	19th to 21st	Sind to east Uttar Pradesh	Sind	Local showers	19th	Formed as secondary over Sind
			west Rajasthan	Local showers	19th & 20th	
			east Rajasthan	A few showers	20th	
6	23rd to 28th	Baluchistan to northern districts of Uttar Pradesh	Kashmir, Punjab(I), Uttar Pradesh	Widespread rain or snow	25th to 27th	
			Baluchistan	A few showers	25th & 26th	
			Punjab (P)	Local rain	25th to 27th	
			Vindhya Pradesh, Bihar	Fairly widespread thundershowers	26th & 27th	

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S. No.	Period	Course	Regions affected	Nature of Precipitation	Period	Remarks
7	26th to 27th	Baluchistan	Feeble	No precipitation		
8	28th to 31st	Baluchistan to Punjab (I)	Baluchistan	Fairly widespread thundershowers	28th & 29th	
			North-West Frontier Province	—— ,, ——	28th to 31st	
			Punjab (P)	—— ,, ——	29th	
			Punjab (P)	Local showers	30th	
			Punjab (I)	Fairly widespread showers	30th	
			Punjab (I)	A few showers	29th & 31st	
			west Uttar Pradesh hills	Local showers	30th & 31st	
			north Rajasthan	A few showers	30th	

Weather was dry elsewhere over the country except for local showers in Assam on a few days and in southeast Madras on the 10th.

In the wake of the first western disturbance, there was a surge of very cold air which caused a fall of temperature of 10° to 15° F. in Western Pakistan, northwest India, Uttar Pradesh and Madhya Bharat. Night temperatures were well above normal in northwest India, the west Uttar Pradesh and the central parts of the country on most days during the second half of the month.

The total rainfall of the month was in moderate to large excess in Uttar Pradesh and Vindhya Pradesh and normal in Assam and the Punjab (I). It was in moderate to large defect in the Bay Islands, Chota Nagpur, Bihar, Rajasthan, Madhya Bharat, Madhya Pradesh, Saurashtra and Kutch, Tamilnad and Travancore-Cochin. Elsewhere no rain fell. Averaged over the plains of India, the month's rainfall was 39% in defect.

The mean maximum temperature was above normal in the Bay Islands, Chota Nagpur, the Punjab (I), east Rajasthan, Vindhya Pradesh and west Madhya Pradesh and normal elsewhere. The mean minimum temperature was above normal in Uttar Pradesh, the Punjab (I), Rajasthan, Madhya Bharat, Gujarat and Saurashtra and Kutch and normal elsewhere.

The mean relative humidity was in excess in west Uttar Pradesh, the Punjab (I), Gujarat, Saurashtra and Kutch, the Konkan and north Hyderabad and in defect in Chota Nagpur, Rayalaseema, Tamilnad and Travancore-Cochin. Elsewhere it was normal.

Cloud amount was in excess in west Uttar Pradesh, the Punjab (I), Malabar and south Kanara and Travancore-Cochin normal in the Bay Islands, Assam, east Uttar Pradesh, Rajasthan, Madhya Bharat, Saurashtra and Kutch and Tamilnad and in defect elsewhere.

Data from Jammu and Kashmir are not available.

Table I contains the divisional and sub-divisional means of rainfall, temperature, humidity and cloud amounts for the 13 chief political divisions and the 28 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs. IST of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 0830 hrs. IST of the date given in the succeeding column.

POONA 5,
dated the 28th February, 1950

S. BASU,
for Director General of Observatories

	Rainfall				Departure from normal of				
							0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"		"		°	°	mb.	%	
Assam (including Manipur and Tripura)	0·55	0·61	−0·06	− 10	+1·4	+0·2	+0·3	−4	−0·1
2 West Bengal ...	0	0·44	−0·44	−100	+1·9	+0·5	0	−3	−0·6
3 Orissa ...	0	0·38	−0·38	−100	+1·7	−0·7	−0·9	−4	−1·2
4 Bihar ...	0·20	0·64	−0·44	− 69	+1·9	+0·4	+0·2	−1	−0·7
5 Uttar Pradesh...	1·41	0·83	+0·58	+ 70	+1·0	+2·6	+1·5	+8	+0·5
6 Punjab (I) ... (including Pepsu and Delhi)	1·08	1·00	+0·08	+ 8	+2·7	+3·5	+1·0	+7	+1·1
7 Rajasthan ...	0·06	0·29	−0·23	− 79	+2·1	+2·9	+1·1	+5	−0·1
Sub-Division									
1 Bay Islands ...	0·03	1·79	−1·76	− 98	+2·0	−0·9	−1·8	−5	+0·1
2 Assam (including Manipur and Tripura)	0·55	0·61	−0·06	− 10	+1·4	+0·2	+0·3	−4	−0·1
3 West Bengal ...	0	0·44	−0·44	−100	+1·9	+0·5	0	−3	−0·6
4 Orissa ...	0	0·38	−0·38	−100	+1·7	−0·7	−0·9	−4	−1·2
5 Chota Nagpur ...	0·08	0·75	−0·67	− 89	+2·0	−0·1	−0·1	−6	−1·0
6 Bihar ...	0·26	0·58	−0·32	− 55	+1·8	+0·7	+0·5	+2	−0·4
7 Uttar Pradesh, East ...	1·37	0·67	+0·70	+104	+0·2	+2·7	+1·4	+5	+0·2
8 Uttar Pradesh, West ...	1·44	1·01	+0·43	+ 43	+1·8	+2·6	+1·7	+10	+0·9
9 Punjab (I) including Pepsu and Delhi)	1·08	1·00	+0·08	+ 8	+2·7	+3·5	+1·0	+7	+1·1
0 Jammu and Kashmir	...	...	Data	incom	plete	...	...	...	...
1 Rajasthan, West	0·09	0·26	−0·17	− 65	+1·9	+3·5	+1·8	+5	−0·3
2 Rajasthan, East, (including Ajmer)	0·03	0·31	−0·28	− 90	+2·3	+2·5	+0·3	+4	0
3 Madhya Bharat	0·01	0·23	−0·22	− 96	+0·9	+2·7	+1·0	+4	+0·3
4 Vindhya Pradesh	1·13	0·81	+0·32	+ 40	+3·3	+0·8	+0·1	−2	−0·7

	Rainfall				Departure from normal of				
							0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division—Contd.	"	"	"		°	°	mb.	%	
8 Madhya Bharat and Vindhya Pradesh	0·49	0·48	+0·01	+ 2	+1·9	+1·9	+0·6	+1	−0·1
9 Madhya Pradesh	0·16	0·45	−0·29	− 64	+1·8	+1·2	+0·8	+3	−0·8
10 Bombay (including Saurashtra & Kutch)	0·01	0·11	−0·10	− 91	+0·4	+1·9	+1·3	+8	−0·4
11 Hyderabad ...	0	0·27	−0·27	−100	+0·5	−0·7	−0·6	+1	−1·2
12 Madras (including Travancore-Cochin	0·17	0·84	−0·67	− 80	+0·1	−0·9	−1·5	−5	−0·3
13 Mysore ...	0	0·17	−0·17	−100	−0·1	−0·2	−1·2	−1	−0·9
Mean of India ...	0·30	0·49	−0·19	− 39	+1·2	+1·1	+0·3	+2	−0·3
Sub-Division—Contd.									
15 Madhya Pradesh East	0·01	0·42	−0·41	− 98	+1·2	+0·8	+0·1	−1	−1·1
16 Madhya Pradesh, West	0·25	0·47	−0·22	− 47	+2·2	+1·4	+1·2	+5	−0·6
17 Gujarat ...	0	0·08	−0·08	−100	−0·9	+3·9	+2·6	+12	−0·3
18 Saurashtra and Kutch ...	0·03	0·07	−0·04	−·57	+0·1	+3·1	+1·2	+13	+0·1
19 Konkan ...	0	0·08	−0·08	−100	+0·2	+0·7	+1·6	+7	−0·5
20 Deccan (Desh)	0	0·17	−0·17	−100	+1·6	+0·1	+0·3	+1	−0·8
21 Hyderabad, North ...	0	0·27	−0·27	−100	+0·7	+0·4	−0·2	+6	−1·3
22 Hyderabad, South ...	0	0·26	−0·26	−100	+9·5	−1·5	−0·9	−2	−1·2
23 Coastal Andhradesa	0	0·41	−0·41	−100	+0·6	−1·3	−0·8	−1	−1·4
24 Rayalaseema	0	0·22	−0·22	−100	−0·4	−0·7	−1·0	−6	−0·7
25 Tamilnad	0·41	1·55	−1·14	− 74	+0·1	−0·8	−2·7	−7	+0·1
26 Malabar and South Kanara	0	0·23	−0·23	−100	−0·5	−0·1	−0·1	0	+0·7
27 Mysore ...	0	0·17	−0·17	−100	−0·1	−0·2	−1·2	−1	−0·9
28 Travancore-Cochin	0·05	0·84	−0·79	− 94	−0·2	−1·0	−1·1	−6	+0·6

STATION	Height of bar, cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			F
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Bay Islands																				
Port Blair ...	259	1004·0	−0·9	1001·3	86·2	+2·0	89	25	70·7	−0·9	64	3,31	81·0	77·7	72·9	72·2	24·1	−1·8	24·5	66
Assam																				
Dibrugarh ...	348	1004·5	−1·9	1000·9	72·6	+1·2	77	5 days	49·9	−0·2	43	14	60·7	61·9	57·2	58·0	14·4	0	14·6	80
Sibsagar ...	317	1005·6	−1·6	1032·0	71·8	+1·3	77	27	49·8	+0·1	43	12	57·8	63·0	56·7	59·4	15·3	+0·7	15·8	93
Tezpur ...	258	1007·9	−1·7	1003·9	75·4	+1·6	79	25,26,27	53·0	+0·5	48	11,12	58·6	65·4	56·4	60·1	14·8	+0·2	15·1	86
Gauhati ...	182	1010·0	−1·7	1006·2	15·1	+0·5	80	22,23,28	52·1	+1·1	47	10,13	58·7	68·5	56·6	61·4	14·8	0	15·5	88
Dhubri ...	115	1012·4	−1·4	1008·9	73·9	+0·5	...	...	54·0	+0·8	...	...	59·3	68·0	57·0	61·0	14·6	0	15·2	86
Silchar ...	96	1013·0	−1·6	1009·2	79·3	+1·3	83	7	53·5	+1·2	48	4 days	63·4	67·9	59·4	62·5	15·7	+0·4	16·7	79
Tura ...	...	...	...	...	74·9	...	81	23	54·3	...	51	12	60·4	65·1	56·0	60·2	13·2	...	15·5	74
West Bengal																				
Dum Dum ...	33	1014·5	...	1011·1	81·1	...	86	23	55·8	...	45	11	64·7	74·7	59·2	64·0	14·7	...	15·8	71
Calcutta ...	21	1015·0	−1·8	1011·5	81·8	+2·2	86	4 days	57·3	+2·7	47	11	65·3	73·1	59·8	63·2	15·1	+0·4	15·2	71
Saugor Island ...	10	1014·9	−2·0	1011·7	77·5	+0·5	83	23	61·6	+3·6	52	1,11	68·5	72·1	64·1	66·1	18·3	+0·7	19·2	78
Sandheads ...	32	1014·2	−2·0	1011·4	...	...	...	...	...	...	...	...	74·3	75·5	68·3	68·1	20·9	+1·4	20·0	72
Midnapore ...	149	1010·1	−2·2	1006·5	82·5	+1·7	88	18	54·0	−1·6	45	11,12	65·1	77·4	56·9	62·2	12·4	−0·8	12·5	57
Contai ...	36	1013·6	...	1010·5	81·9	...	89	22	58·3	...	48	11	64·3	75·2	60·5	64·8	16·1	...	16·1	79
Burdwan ...	105	1011·9	−2·0	1008·6	81·4	+2·5	86	18,20,23	54·4	−0·3	48	11,12	60·7	76·8	55 5	63·9	12·9	−0·3	14·4	70
Krishnagar ...	48	1014·4	−1·4	1010·8	81·8	+3·7	87	3,18	50·9	−0·7	42	11	60·8	74·2	56·7	63·5	14·0	+0·3	15·4	77
Asansol ...	414	1001·4	−1·4	997·7	80·4	+2·6	85	4 days	53·1	+0·4	46	11	62·7	74·2	56·5	62·3	13·0	+0·8	13·7	66
Berhampore ...	62	1013·7	−1·9	1009·8	79·8	+3·1	...	...	53·4	+0·2	46	11	62·1	73·9	56·5	63·1	13·2	−0·7	14·6	68
Malda ...	103	1012·7	−1·3	1008·9	75·9	+1·4	80	28	50·0	0	42	5	63·9	69·4	57·6	60·7	13·2	−0·2	14·4	66
Cooch Bihar ...	145	1011·5	...	1007·7	76·3	...	79	6 days	51·6	...	47	1,14	61·0	67·6	56·9	61·8	14·1	...	16·0	77
Jalpaiguri ...	271	1006·3	−1·7	1002·7	74·0	+0·4	78	7	52·0	+1·0	47	14	56·0	70·2	54·2	61·8	13·3	−0·5	14·4	88
Orissa																				
Balasore ...	65	1013·7	−1·6	1010·2	83·3	+2·4	89	21	57·4	+1·1	48	11	63·3	72·6	60·4	65·3	14·3	+0·5	17·8	61
Chandbali ...	20	1015·1	−1·8	1011·7	84·3	+3·0	91	31	59·2	+1·2	50	11.12	67·0	74·7	62·3	65·5	17·1	+1·0	17·4	77
Puri ...	20	1015·3	−1·1	1011·8	81·5	−1·5	86	23	64·3	+0·6	56	11,12	70·9	76·6	64·5	68·4	17·7	−1·0	20·3	68
Cuttack ...	87	1012·4	−2·1	1008·8	84·8	+1·7	89	6 days	59·4	−0·4	51	12	64·1	79·0	59·7	64·7	15·4	−1·3	14·2	75
Gopalpur ...	56	1013·9	−1·2	1010·5	82·1	+1·5	86	1	61·6	−0·7	54	11,12	68·6	76·9	63·6	70·5	17·8	−0·2	22·4	74
Angul ...	455	1000·2	−1·1	996·4	83·9	+1·1	89	31	55·6	−0·5	48	12	63·6	79·1	57·4	62·3	13·6	−1·1	11·4	66
Sambalpur ...	486	999·1	−1·3	995·2	84·5	+2·7	91	31	52·3	−2·7	42	11	62·9	78·5	57·3	62·9	13·6	−0·7	12·6	69
Jharsuguda ...	726	990·4	...	986·7	...	...	...	...	...	...	...	...	62·0	74·0	56·9	61·3	13·6	...	13·0	72
Titilagarh ...	691	991·5	...	981·4	85·0	...	92	1,31	55·7	...	42	12	63·5	80·6	57·7	64·0	13·5	...	13·0	68
Chota Nagpur																				
Purulia ...	835	987·1	...	983·2	80·5	...	86	31	54·9	...	48	11	63·9	74·8	58·7	62·3	11·7	...	13·6	57
Jamshedpur ...	423	1001·2	−1·7	997·1	80·4	0	87	31	53·1	+1·8	44	11	60·4	76·6	55·0	62·4	12·2	−0·4	13·1	69
Chaibasa ...	742	989·9	−1·3	986·3	82·4	+3·2	89	21	53·3	+0·9	45	11	60·6	77·8	54·6	61·8	11·9	−1·3	11·7	65
Ranchi ...	2,150	940·8	−1·7	938·4	77·2	+3·7	87	31	48·6	−2·5	43	4 days	60·6	70·5	52·2	57·4	10·4	+0·2	10·9	55
Hazaribagh ...	2,006	946·3	−1·3	943·6	74·2	+1·4	81	31	49·0	−1·3	41	12	59·0	67·6	51·5	55·2	10·0	+0·1	9·9	58
Daltonganj ...	725	990·6	−1·9	987·1	77·6	+1·7	84	26,31	48·2	+0·7	39	11	56·6	71·7	53·0	62·1	12·2	+0·7	14·8	74
Dhanbad ...	839	986·3	...	...	79·8	...	90	22	52·5	...	45	11	62·4	...	54·4	...	10·9	...	...	56
Bihar																				
Purnea ...	124	1011·9	−1·6	1008·1	75·8	+1·1	79	4 days	48·2	+0·5	41	11	57·6	66·0	54·3	60·3	13·2	+0·7	15·5	83
Saharsa ...	156	1010·5	...	1007·1	74·2	...	79	31	49·4	...	43	5,11	58·4	68·2	54·8	60·4	13·1	...	14·2	78

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from:—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
3·5	+0·1	3·8	0·03	-1·76	0·02	8	0	-2·3	7·5	-1·0	2	22	3	0	0	0	2	1	1	2	25	3	0	0	0	0	0	1	**Bay Islands** Port Blair
2·6	-1·5	3·0	1·18	-0·31	0·67	28	3	-0·7	1·0	+0·4	2	4	12	3	1	0	1	4	4	0	2	1	0	0	0	0	0	28	**Assam** Dibrugarh
4·9	-1·5	3·3	1·93	+0·72	0·81	28	5	+1·5	1·8	+0·7	8	6	1	0	1	2	0	2	11	6	6	0	0	0	0	0	3	16	Sibsagar
2·4	-0·3	1·5	0·79	+0·21	0·38	28	2	+0·5	1·8	+0·1	3	13	13	1	0	0	0	0	1	5	4	6	0	0	0	0	0	16	Tezpur
2·6	+0·6	3·0	0	-0·38	0	...	0	-1·1	1·7	+0·5	6	4	4	2	2	0	0	3	10	1	6	3	0	0	1	0	0	20	Gauhati
2·3	+0·6	2·1	0	-0·31	0	...	0	-0·8	2·8	-0·3	4	11	6	2	0	2	0	0	6	1	3	3	0	0	0	5	5	14	Dhubri
1·3	-0·5	0·7	1·12	+0·35	0·67	18	3	+1·5	0·8	+0·3	0	1	10	1	0	0	0	0	19	0	0	0	0	0	0	0	0	31	Silchar
0·6	...	2·2	0	...	0	0	0	...	3·6	...	0	5	13	8	2	0	0	1	3	1	4	2	9	4	2	0	0	9	Tura
0·9	...	0·4	0	...	0	...	0	...	2·7	...	6	2	3	0	1	1	1	4	13	9	2	0	0	2	2	2	5	9	**West Bengal** Dum Dum
0·7	-1·1	0·7	0	-0·37	0	...	0	-0·8	1·1	-0·9	7	2	2	1	1	1	1	3	13	1	0	0	0	1	3	0	1	25	Calcutta
1·1	-1·1	0·5	0	-0·41	0	...	0	-0·9	8·0	+2·5	13	6	1	0	1	4	1	3	2	7	1	0	2	10	9	0	0	0	Saugor Island
2·2	+0·4	0·9	0	-0·19	0	...	0	-0·5	...	...	7	6	0	0	0	6	6	2	4	7	3	0	0	3	6	4	3	5	Sandheads
0·9	-0·9	0·7	0	-0·47	0	...	0	-0·9	2·7	+1·1	13	12	0	0	0	1	1	0	4	9	7	1	0	0	1	0	3	10	Midnapore
0·7	...	0·5	0	...	0	...	0	...	3·2	...	10	1	0	1	1	1	0	8	8	6	0	0	4	10	6	0	2	3	Contai
0·9	-0·9	0·5	0	-0·45	0	...	0	-0·9	2·2	+1·0	5	4	1	0	0	2	2	10	7	5	2	0	0	2	2	1	6	12	Burdwan
0·6	-0·7	0·7	0	-0·45	0	...	0	-0·9	1·9	+0·8	7	1	1	1	6	0	14	1	0	2	0	0	0	0	1	3	1	24	Krishnagar
0·8	-1·1	0·7	0	-0·67	0	...	0	-1·4	3·5	+0·2	0	0	0	0	0	0	3	11	17	1	0	0	0	0	0	4	7	19	Asansol
1·6	-0·2	1·0	0	-0·38	0	...	0	-1·0	1·0	-0·1	7	0	2	0	3	1	3	3	12	1	2	0	1	0	1	0	1	25	Berhampore
0·9	-0·1	0·5	0	-0·54	0	...	0	-0·9	2·6	-0·1	4	2	0	0	0	2	3	11	9	3	2	1	0	0	0	4	12	9	Malda
1·9	...	1·9	0	-0·26	0	...	0	-0·5	2·1	...	3	7	17	0	0	1	1	0	2	1	0	2	0	3	1	2	0	22	Cooch Bihar
2·2	+0·8	2·2	0	-0·31	0	...	0	-0·7	2·5	+1·6	16	5	1	0	0	0	0	3	6	0	1	3	4	1	3	5	1	13	Jalpaiguri
0·7	-1·1	0·7	0	-0·53	0	...	0	-1·0	2·1	+0·3	13	3	0	0	1	1	1	6	6	0	0	0	2	4	1	0	0	24	**Orissa** Balasore
1·0	-0·8	2·1	0	-0·20	0	...	0	-0·7	3·8	+0·2	8	2	0	1	1	4	3	12	0	0	8	3	15	3	2	0	0	0	Chadbali
0·7	-1·1	0·6	0	-0·41	0	...	0	-0·6	7·9	+1·7	18	3	2	0	0	4	2	2	0	0	4	1	4	10	11	1	0	0	Puri
1·0	-1·0	0·6	0	-0·32	0	...	0	-0·7	1·9	+0·8	1	2	0	0	0	0	0	0	28	0	0	0	0	0	1	0	0	30	Cuttack
0·6	-0·8	0·9	0	-0·28	0	...	0	-0·5	6·2	+0·1	26	1	0	0	0	0	0	4	0	0	1	6	2	14	8	0	0	0	Gopalpur
0·6	-1·7	0·7	0	-0·59	0	...	0	-0·9	3·6	+0·6	2	0	0	0	1	3	13	5	7	11	5	2	1	2	2	3	4	1	Angul
0·4	-1·4	0·6	0	-0·43	0	...	0	-0·9	1·3	-0·6	5	4	3	1	0	0	0	1	17	2	2	0	1	3	3	1	2	17	Sambalpur
0·5	...	0·5	0	...	0	...	0	...	...	...	21	2	0	0	0	0	0	0	8	1	0	0	1	0	0	0	0	29	Jharsuguda
0·2	...	0·5	0	...	0	..	0	...	0·8	...	0	0	0	2	2	1	0	0	26	4	6	2	1	1	0	0	1	16	Titilagarh
0·8	...	0·7	0	...	0	...	0	. .	1·6	...	3	1	0	0	0	5	7	11	4	0	2	0	0	0	2	1	7	19	**Chota Nagpur** Purulia
0·7	-1·2	0·8	0	-0·36	0	...	0	-0·9	2·3	+0·8	0	1	1	0	0	2	13	6	8	2	3	2	0	0	4	4	2	14	Jamshedpur
1·4	-0·6	1·5	0	-0·64	0	...	0	-1·4	1·2	0	1	1	0	0	0	15	1	1	12	0	2	0	0	0	10	1	0	18	Chaibasa
0·3	-1·8	0·2	0	-0·92	0	...	0	-1·8	2·8	-0·7	3	0	0	0	0	0	1	4	23	3	0	0	0	1	0	2	3	22	Ranchi
1·3	-0·6	0·6	0	-0·89	0	...	0	-1·9	5·0	-1·2	3	0	0	1	1	7	6	9	4	6	0	0	1	0	0	1	21	2	Hazaribagh
1·0	-0·6	1·1	0·38	-0·54	0·38	27	1	-0·9	2·3	+0·5	1	1	4	6	1	0	5	0	13	2	1	6	0	1	0	9	9	3	Daltonganj
...	...	...	0	...	0	...	0	...	3·8	...	2	1	0	1	0	8	4	2	13	...	...	...	...	...	...	...	...	...	Dhanbad
0·8	-0·6	0·8	0·01	0·40	0·01	27	0	-0·8	2·0	+0·6	1	1	5	1	2	7	8	0	6	0	0	0	0	0	3	1	0	27	**Bihar** Purnea
1·7	...	1·3	0·03	...	0·03	27	0	...	1·8	...	0	4	7	0	0	10	4	0	6	0	0	1	0	0	2	2	0	26	Saharsa

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relati humidi %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Bihar *(Contd)*																					
Darbhanga ...	161	1010·5	-1·6	1007·1	75·1	+0·8	79	23,25,26	51·1	+1·3	46	5,12	55·8	68·5	53·9	61·7	13·2	+0·2	15·5	88	+6
Motihari ...	218	1008·4	-1·3	1005·0	73·0	-0·1	79	22,24	47·5	+0·6	42	1,11,12	58·0	64·5	55·5	59·8	13·9	+1·4	16·3	84	+6
Patna ...	173	1010·0	-1·9	1006·6	74·7	+1·7	81	22	51·7	+0·6	43	5	59·4	69·6	54·5	60·0	12·2	0	13·5	72	+1
Dehri ...	352	1003·6	...	1000·0	76·7	...	83	31	52·2	...	40	6	59·7	71·7	54·9	59·8	12·3	...	12·1	72	...
Gaya ...	365	1033·0	-1·9	999·6	76·8	+2·5	84	31	49·8	+0·6	42	10	51·5	70·5	52·6	59·1	11·3	+0·8	11·9	70	+7
Dumka ...	489	998·1	-2·4	994·7	79·5	+3·5	85	18,31	57·3	+0·4	45	11,12	58·1	74·8	53·4	61·5	12·1	0	72·5	70	+4
Sabour ...	122	1011·7	-2·0	1008·0	75·3	+1·3	80	26	46·1	+1·1	37	5	58·2	61·8	54·8	60·9	13·0	+1·2	15·5	79	-3
U. P., East																					
Gonda ...	360	1003·4	...	1000·4	72·7	-1·1	80	19	49·3	+3·5	42	10	51·2	55·7	52·0	60·6	12·8	+2·3	15·3	87	+7
Gorakhpur ...	254	1006·1	-2·3	1003·3	73·2	+0·2	80	22	51·2	+2·7	45	11	56·8	69·0	53·9	61·3	12·5	+0·8	14·9	82	+3
Azamgarh ...	255	1006·4	...	1003·5	74·8	...	81	19	49·3	...	40	9	53·5	70·0	52·2	63·0	12·8	...	16·5	91	...
Banaras ...	250	1007·1	-1·8	1003·9	74·5	+0·3	82	2	49·3	+1·2	40	5	55·1	70·8	52·8	60·5	12·5	+0·7	13·3	85	+7
Allahabad (Bamrauli) ...	322	1004·6	-1·9	1001·5	75·3	-0·5	85	2	49·6	+2·5	41	5 days	55·3	70·5	52·6	60·6	12·2	+1·4	13·5	83	+3
Fatehpur	375	1002·7	...	999·4	75·9	+0·7	84	21	49·1	+2·7	37	5	55·0	73·1	51·5	60·3	11·4	+0·8	12·2	77	+8
Banda ..	398	1002·0	...	999·2	77·7	...	90	15	49·6	+1·5	40	5 days	58·6	73·8	52·7	58·8	10·9	...	10·1	65	...
Kanpur ...	414	1001·0	-1·9	998·4	74·5	+2·6	83	20	47·2	+1·5	35	6	52·2	70·2	50·3	60·0	11·4	+1·0	13·2	87	+9
Lucknow ...	371	1003·0	-1·4	1000·3	73·4	-0·5	80	2,19,20	50·0	+2·9	40	9	54·3	68·4	51·8	61·6	11·9	+1·3	15·2	84	+6
Bahraich ...	407	1001·8	-0·9	998·9	...	...	...	...	51·3	+4·2	44	7,8	57·9	66·8	55·1	61·6	13·6	+2·6	16·4	82	+1
U. P., West																					
Jhansi ...	823	986·6	-2·4	983·8	79·5	+3·4	89	20,30	50·0	+2·6	37	4	56·3	74·5	51·5	60·8	10·1	+0·4	12·0	70	+8
Agra ...	553	996·1	-2·1	993·7	74·4	+1·8	84	30	47·8	+3·5	37	5	51·2	71·5	48·2	59·4	10·0	+1·8	12·0	80	-16
Mainpuri ...	516	997·7	-1·7	994·9	74·9	+1·7	82	2,19,20	48·5	+2·9	37	9	53·3	70·1	51·6	63·6	12·1	+2·5	17·1	88	+15
Aligarh ...	615	993·9	..	991·7	73·0	+2·1	81	19,30	46·2	+1·0	34	5	51·8	68·3	49·4	59·6	11·0	+3·0	13·4	82	+18
Bareilly ...	568	995·1	-2·0	992·7	72·3	+1·5	80	19	49·8	+3·5	38	9	54·2	67·4	51·9	59·2	12·1	+1·7	13·7	84	+3
Meerut ...	728	990·9	...	...	71·0	...	79	19,30	47·6	...	36	9	51·3	...	48·5	...	10·5	...	...	81	...
Roorkee ...	899	983·4	-2·0	981·3	70·0	+1·6	78	19	47·2	+3·5	39	9,10	50·4	66·0	48·6	51·5	10·7	+1·3	12·3	87	+4
Dehra Dun ...	2239	937·6	-0·8	936·1	66·8	+0·6	73	20	45·8	+1·3	38	7	50·2	61·1	47·3	54·9	9·6	+1·1	12·1	80	+7
Punjab (I)																					
New Delhi ...	714	990·4	-1·9	983·1	72·3	+1·8	83	30	48·2	+4·9	38	4,9	52·0	67·5	48·1	56·8	9·6	+1·9	10·9	74	+9
Hissar ...	725	990·3	-2·0	987·6	73·0	+3·0	82	14,19	44·8	+3·4	32	4,5	48·4	70·0	25·4	57·2	9·0	+1·3	10·2	77	+8
Karnal ...	818	986·2	...	984·7	70·3	...	79	1,19	47·3	...	36	9	49·7	65·6	47·8	56·5	10·5	...	11·6	84	...
Ambala ...	892	983·9	-1·7	981·7	71·8	+2·7	80	1	47·6	+4·2	39	5	51·2	66·0	48·4	57·3	10·0	+1·0	11·6	80	+5
Patiala ...	822	985·9	...	984·0	76·0	...	78	1,19	47·4	...	34	9	50·5	64·1	47·3	55·9	9·9	...	11·7	84	...
Ludhiana ...	810	986·6 (k)	-2·1	984·9 (j)	70·3 (k)	+3·4	78	16	45·9	+2·2	36	3	53·1 (k)	66·6 (j)	47·4 (k)	36·0 (j)	8·5 (k)	-0·3	10·7 (j)	83 (k)	+4
Ferozepore ...	657	990·8	...	990·0	68·7	...	...	...	...	...	...	...	50·5	65·9	49·2	57·8	11·3	...	12·9	91	...
Amritsar ...	756	988·3	...	986·8	67·2	...	73	1,16,17	43·0	...	30	3	46·0	62·2	44·8	54·4	9·5	...	10·9	90	...
Jammu & Kashmir																					
Srinagar ...	5205	843·7	-1·9	842·2	39·3	-1·7	46	19	30·1	+2·8	22	2,3	31·8	36·0	30·5	33·7	5·4	+0·4	7·1	87	+1
Gulmarg ...	8709	...	...	...	....	...	...	closed	during	winter	mon	ths ...	...	...	...	...	...	...	...	...	...
Dras (R) ...	10,059	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Leh ...	11,539	663·3	-1·4	662·2	27·4	-2·0	35	14,15	7·8	-0·2	-6	33	11·8	18·6	8·8	15·5	1·4	-0·1	2·0	62	+3
Skardu . (R) ...	7505	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gilgit (R) ...	4890	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Miagar (R) ...	10,190	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...

(R) Register not recieved. (j) Mean of 21 days (k) Mean of 20 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I. S. T.									1730 hrs. I. S. T.								
0830 hrs I.S.T.	Departure from normal	Mean 1730 h.s. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bihar *(Contd)*
1·7	+0·1	1·0	0·11	−0·33	0·11	26	1	0	0·9	−0·5	0	4	3	1	0	2	7	1	13	0	0	0	0	0	0	5	0	26	Darbhanga
1·8	−0·2	1·4	0·47	0	0·45	26	1	−0·1	2·1	+0·6	1	0	6	2	1	1	3	3	14	1	0	3	0	0	0	8	0	19	Motihari
1·1	−0·6	1·8	0·39	−0·20	0·26	27	2	+0·7	2·9	+0·7	0	5	0	1	4	9	5	3	4	4	2	0	1	0	2	7	4	11	Patna
1·5	...	1·8	0·61	−0·07	0·56	27	1	−0·5	3·0	...	0	0	0	2	4	22	1	1	1	1	9	1	0	0	1	0	16	3	Dehri
1·1	−0·6	1·1	0·67	−0·05	0·65	27	1	−0·3	3·4	+0·2	0	1	1	10	15	3	0	0	1	5	2	0	0	0	0	3	17	4	Gaya
0·8	−0·6	0·4	0	−0·67	0	...	0	−1·3	2·0	+0·7	0	1	0	0	0	1	0	9	20	1	2	0	1	0	2	1	13	11	Dumka
1·5	−0·3	1·5	0·06	−0·48	0·06	27	0	+0·1	2·8	−0·3	1	3	0	3	2	12	6	0	4	2	1	1	0	0	0	3	14	10	Sabour
																													U. P., East
2·4	+0·1	2·6	2·12	+1·61	1·97	26	2	+0·8	2·8	+0·1	0	0	8	0	0	1	8	3	11	0	0	3	0	0	0	3	0	25	Gonda
1·0	−0·4	1·5	0·85	+0·26	0·60	26	2	+0·7	1·8	+0·7	1	4	2	2	0	1	10	0	11	0	1	1	2	0	2	8	1	16	Gorakhpur
1·2	...	2·3	0·64	...	0·45	26	2	...	2·2 (c)	...	3	3	1	2	1	4	7	2	8	4	2	1	1	0	3	8	1	11	Azamgarh
1·5	−0·1	1·8	1·89	+1·15	1·19	26	2	+0·5	3·6	+1·4	0	2	3	1	6	11	4	0	4	3	6	1	1	0	3	14	3	0	Banaras
1·7	−0·6	2·0	1·03	+0·18	0·85	26	2	+0·9	2·7	+0·1	1	0	5	2	2	9	2	2	8	1	4	3	1	0	0	6	5	11	Allahabad (Bamrauli)
2·6	+0·7	2·4	0·88	+0·34	0·58	26	2	+0·6	2·4	+0·4	0	0	4	3	1	0	2	1	20	0	0	2	0	0	0	4	2	23	Fatehpur
1·5	...	1·6	0·56	...	0·45	26	2	...	2·2	...	1	1	3	0	0	2	12	0	12	0	2	2	1	0	3	14	0	9	Banda
2·6	+1·3	2·2	0·57	+0·01	0·30	26	2	+0·6	4·3	+2·5	0	3	5	0	0	4	4	2	13	2	1	5	2	0	5	6	2	8	Kanpur
2·2	+0·4	2·7	2·07	+1·31	1·57	26	2	+0·5	1·5	+0·2	4	0	4	0	4	3	4	2	10	2	2	3	0	1	0	8	0	15	Lucknow
1·7	+0·2	2·3	1·59	+0·77	1·27	26	2	+0·4	2·6	+1·0	1	0	5	5	0	1	4	4	11	0	0	1	1	0	2	2	0	25	Bahraich
																													U. P., West
1·7	0	1·2	0·36	−0·18	0·23	26	2	+0·8	2·4	+0·2	3	1	0	0	0	2	14	1	10	3	1	0	0	0	4	8	4	11	Jhansi
2·4	+0·2	2·3	0	−0·51	0	...	0	−1·2	1·8	−0·9	0	0	0	0	0	0	2	1	28	1	1	0	1	1	0	0	5	22	Agra
3·5	+1·3	3·2	0·52	−0·05	0·29	26	2	+0·7	1·3	−0·1	0	0	2	1	0	0	2	1	25	1	0	0	2	0	0	5	1	22	Mainpuri
3·3	+1·8	3·4	0·78	+0·32	0·76	25	1	−0·2	3·9	+0·6	0	0	5	1	0	0	6	0	19	1	0	4	0	0	0	2	1	23	Aligarh
3·3	+1·0	4·7	1·20	+0·21	0·85	25	2	+0·1	2·4	+0·9	3	2	3	4	0	0	3	3	13	1	0	1	2	1	0	8	2	16	Bareilly
3·0	...	...	1·02	−0·23	0·38	25	4	+1·5	...	...	1	1	0	6	1	0	1	9	12	...	...	...	...	...	...	...	...	...	Meerut
3·3	+0·7	2·7	3·07	+1·40	1·16	27	6	+3·2	1·5	−0·3	0	0	0	3	0	2	0	6	20	0	0	0	4	0	0	0	6	21	Roorkee
4·5	+1·1	4·7	4·18	+1·86	1·35	27	8	+4·1	1·6	+0·1	1	7	0	1	1	0	1	3	17	0	0	1	1	1	7	3	0	18	Dehra Dun
																													Punjab (I)
3·5	+1·0	3·9	0·54	−0·45	0·30	25	2	0	5·7	+3·7	2	1	3	5	2	2	10	4	2	3	4	4	4	2	1	3	9	1	New Delhi
2·8	+0·6	2·2	0·43	−0·07	0·17	30	2	+0·6	4·1	+0·8	2	2	2	5	3	6	6	2	3	4	2	1	1	2	4	3	9	5	Hissar
4·6	...	4·3	1·43	...	0·43	27	5	...	3·1	...	7	3	3	4	0	0	8	4	8	1	2	2	5	0	0	6	6	9	Karnal
3·8	+1·4	3·8	2·84	+1·52	1·09	26	6	+3·5	...	...	0	0	0	5	0	0	0	6	20	0	0	0	5	0	0	0	9	17	Ambala
4·6	...	4·4	2·14	...	0·83	20	5	...	4·0	...	5	1	5	4	0	0	2	5	9	6	1	0	6	0	0	6	6	6	Patiala
4·3 (k)	+1·6	3·8 (j)	2·28 (k)	+0·77	0·88	26	4	+1·3	2·1 (k)	+0·8	0	1	2	6	0	0	1	6	15	0	2	0	3	0	0	0	4	23	Ludhiana
4·1	...	4·0	1·18	...	0·55	18	3	...	1·4	...	2	3	0	1	1	2	2	0	9	2	3	0	1	3	2	0	3	7	Ferozepore
4·6	...	4·7	2·15	...	0·78	19	4	...	2·9	...	2	1	4	4	0	0	0	2	18	6	3	2	2	0	0	3	7	8	Amritsar
																													Jammu & Kashmir
7·7	+1·1	7·0	7·84	+4·94	1·26	26	14	+7·9	2·6	+0·4	6	1	0	2	0	0	2	10	10	9	5	0	2	0	0	2	8	5	Srinagar
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Gulmarg
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Dras (R)
5·3	−0·1	5·8	0·86	+0·48	0·21	19	4	+3·0	2·8	+1·7	1	15	0	0	2	2	0	0	11	0	14	0	0	0	3	0	0	14	Leh
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Skardu (R)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Gilgit (R)
...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Miagar (R)

(c) Mean of 28 days

STATION	Height of bar cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relat humic %	
		Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Rajasthan, West																					
Sri Ganganagar ...	580	(l) 992·6	...	(k) 990·2	69·5	+1·7	78	30	43·8	+5·7	32	4,5	48·1	64·9	45·8	56·0	9·6	+2·5	11·3	83	+8
Bikaner ...	734	989·4	-2·3	986·8	73·4	+2·0	82	5days	44·1	+3·2	29	4	48·7	70·6	44·4	58·5	8·0	+0·8	11·7	70	+5
Jaisalmer ...	743	986·8	...	984·8	74·0	...	86	1	48·2	...	35	5	52·3	73·5	41·0	54·7	7·6	...	6·1	54	..
Jodhpur ...	736	989·4	-0·6	986·8	77·7	+1·4	87	30	51·0	+2·4	43	6	54·2	75·1	46·3	56·7	7·0	+0·4	7·2	49	+2
Phalodi ...	800	987·4	...	979·3	74·4	...	85	30	47·4	...	35	7	49·9	71·7	44·7	57·9	7·3	...	10·0	58	...
Barmer ...	638	992·5	-2·0	990·2	78·8	+2·4	87	1,29	52·5	+2·5	45	4 days	58·5	75·5	52·6	58·7	10·8	+3·4	9·4	58	+7
Rajasthan, East																					
Sikar ...	1419	965·5	...	963·5	73·8	...	80	29,30	44·4	...	29	6	49·0	70·0	44·5	55·9	8·0	...	9·1	68	...
Jaipur ...	1431	965·6	-2·1	963·2	75·5	+2·3	83	30	48·6	+1·8	35	6	56·2	70·8	48·8	55·5	8·4	+0·5	8·5	55	-1
Ajmer ...	1593	960·1	-1·9	957·5	74·3	+1·8	82	29,30	48·1	+2·4	35	5	51·4	70·4	45·8	54·8	7·6	-0·5	7·6	62	+6
Kotah ...	843	986·1	-2·0	982·6	80·0	+2·9	90	30	53·6	+2·5	42	4	56·9	76·0	50·6	59·7	9·6	+0·6	10·0	62	+5
Jhalawar ...	1053	978·0	-2·3	974·3	80·2	+2·3	89	30	51·0	+3·1	38	3	53·7	78·4	48·5	59·5	9·4	+0·8	8·8	63	+5
Udaipur ...	1910	949·2	...	946·4	78·0	...	86	30	(a) 49·3	...	37	3	55·1	74·6	48·6	58·0	8·7	...	9·1	61	...
Madhya Bharat																					
Gwalior ...	681	991·7	...	988·3	77·7	...	89	30	46·5	...	32	4	56·4	71·2	50·4	58·8	9·8	...	11·5	63	...
Guna ...	1571	960·6	-1·8	957·9	79·9	+2·8	88	30	47·9	+2·2	33	3	53·8	74·9	49·0	59·2	9·8	-1·4	10·9	68	+3
Neemuch ...	1626	959·2	-1·4	956·5	79·7	-2·6	88	30	52·1	+3·5	41	3	55·7	76·5	48·9	59·8	8·9	+0·6	10·7	59	+4
Ratlam ...	1596	960·4	...	957·0	81·3	...	89	24	53·1	...	47	3	55·7	78·2	49·8	61·2	9·8	...	11·5	65	...
Indore ...	1823	951·3	-1·6	948·2	80·9	+1·4	87	24,25,30	54·3	+1·9	44	4	58·7	78·2	52·1	61·2	10·7	+0·5	11·6	62	+3
Bhopal ...	1643	958·1	-2·0	955·4	81·1	+1·8	89	30	53·2	+3·4	42	3	59·6	77·1	52·2	60·3	10·4	+1·4	10·6	60	+6
Bairagarh ...	1714	955·9	-1·8	953·0	80·7	+1·4	89	30	53·1	+3·3	44	4	59·4	76·2	51·4	58·8	9·0	-0·5	9·6	56	+1
Madhosagar ...	757	988·9	...	986·2	77·9	...	88	30	51·2	...	41	4,5,6	56·0	72·5	50·5	57·9	10·1	...	10·0	65	..
Vindhya Pradesh																					
Nowgong ...	750	989·7	-1·5	986·4	77·7	+2·8	89	20	47·3	+0·7	35	4	54·7	73·1	50·3	59·1	10·5	+0·3	10·9	72	-
Sutna ...	1041	978·8	-2·0	975·7	79·6	+4·6	87	20,21	48·1	0	37	4	54·5	76·9	49·2	60·1	9·4	-1·0	10·4	64	-
Umaria ...	1506	962·9	...	960·0	77·8	+2·4	88	24	49·6	+1·7	39	10,13	57·1	73·9	52·1	60·2	11·2	+1·1	12·3	70	+
Madhya Pradesh East																					
Gondia ...	1026	980·0	...	976·7	83·0	...	89	31	55·4	...	49	13	53·0	80·5	57·9	65·0	14·1	...	14·1	72	..
Pendra ...	2040	945·1	-1·5	942·3	77·9	+3·3	85	31	52·7	+2·1	45	4,9,11	61·9	71·3	53·7	58·0	10·8	-0·2	11·1	58	-
Champa ...	805	987·6	...	984·0	83·5	...	90	31	56·2	...	48	11	60·5	80·5	55·7	64·0	13·0	...	13·2	71	.
Raipur ...	979	981·5	-1·1	978·2	82·9	+1·3	90	31	57·2	+1·4	49	11	64·8	80·2	57·9	64·2	13·2	+0·8	13·1	64	+
Kanker ...	1318	969·9	-1·2	966·5	83·2	+0·6	88	31	52·8	+0·5	42	11	62·1	79·6	57·0	64·2	13·6	+0·6	13·5	72	+
Chanda ...	634	993·9	-1·2	989·3	85·0	-0·2	90	30	56·5	+1·1	42	12	64·3	81·5	59·3	66·1	15·0	+0·9	15·0	55	+
Jagdalpur ...	1815	953·3	-0·8	949·3	82·9	+1·1	89	31	49·5	-0·9	40	11	58·7	79·2	54·7	61·4	12·9	-1·6	11·4	77	-
Madhya Pradesh West																					
Buldhana ...	2133	941·3	...	938·6	87·8	...	88	31	60·5	...	52	3	63·9	80·7	56·6	65·0	12·8	...	14·6	62	.
Akola ...	925	982·5	-1·5	978·7	88·0	+1·9	93	30,31	56·3	+1·4	47	12,13	60·4	85·2	53·7	64·3	11·4	+1·7	11·8	62	+
Amravati ...	1213	972·9	-1·0	969·5	86·5	+1·7	91	30,31	60·9	+1·8	54	3,12,13	66·0	83·7	56·0	62·7	10·8	+0·4	9·9	50	-
Yeotmal ...	1481	...	...	...	85·0	...	92	31	60·1	...	53	13	67·0	82·0	59·0	64·0	13·5	...	12·3	61	.
Khandwa ...	1044	978·4	-1·6	974·5	86·6	+1·6	92	24,30	55·0	+2·4	48	11,12	63·9	83·0	56·1	65·6	11·8	+2·2	13·6	59	+
Hoshangabad ...	992	980·9	-1·7	977·1	83·2	+2·8	90	30	55·0	+0·8	47	12	61·0	79·1	53·9	62·4	11·0	+0·9	11·7	61	-
Sagar ...	1808	952·4	-1·7	949·9	77·9	+1·2	85	20,30	54·7	+2·2	43	3	59·7	73·9	51·0	57·4	9·1	+0·9	9·5	53	-
Jabalpur ...	1289	970·7	-1·1	967·3	81·8	+4·1	89	30	50·0	+2·1	40	11	56·9	76·7	52·6	62·6	11·6	+0·6	13·1	73	.
Seoni ...	2027	945·2	-1·4	942·7	81·0	+3·3	88	31	53·5	+1·6	45	11	59·2	75·9	53·9	61·9	11·7	+1·1	13·3	70	.

(l) Mean of 19 days (k) Mean of 20 days (a) Mean of 30 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Rajasthan, West
1·8	−1·4	1·9	0·16	−0·29	0·10	20	1	−0·3	...	...	3	1	8	0	0	2	2	0	15	2	2	1	0	0	1	3	3	19	Sri Ganganagar
2·1	+0·1	3·1	0·18	−0·09	0·10	30	1	+0·2	2·5	−0·5	0	4	1	7	1	4	1	1	12	0	14	0	2	0	7	1	6	1	Bikaner
1·3	...	2·0	0·16	...	0·16	19	1	...	5·9	...	0	13	1	0	0	5	0	1	11	1	15	0	0	0	9	1	4	1	Jaisalmer
2·5	+0·1	2·9	0·04	−0·11	0·04	20	0	−0·3	4·5	−2·4	3	17	1	0	0	2	4	0	4	2	7	3	0	1	6	7	3	2	Jodhpur
2·6	...	2·5	0	−0·14	0	...	0	−0·5	6·5	...	2	3	2	5	11	4	3	1	0	4	6	1	1	4	8	3	4	0	Phalodi
2·1	0	2·6	0	−0·18	0	...	0	−0·4	4·6	−0·1	4	1	0	1	1	2	2	16	4	2	6	1	1	1	4	3	10	3	Barmer
																													Rajasthan, East
3·2	...	3·6	0·08	...	0·08	20	0	...	4·4	...	2	0	8	12	3	2	1	1	2	10	1	2	1	2	2	13	0	0	Sikar
2·6	+0·4	3·9	0·04	−0·40	0·03	30	0	−1·0	3·5	0	2	2	7	6	1	0	0	0	13	3	0	3	1	7	1	9	5	2	Jaipur
2·0	+0·1	2·1	0	−0·37	0	...	0	−1·0	3·4	+1·5	4	1	1	1	0	4	2	3	15	1	5	1	1	0	6	5	3	9	Ajmer
2·2	+0·5	2·1	0	−0·24	0	...	0	−0·6	0·4	−0·9	0	1	1	0	0	1	1	0	27	0	0	0	0	0	0	3	1	27	Kotah
1·6	−0·1	1·8	0·11	−0·17	0·11	25	1	+0·3	2·9	+0·9	2	0	0	1	1	0	0	1	26	4	9	1	0	0	4	5	1	7	Jhalawar
1·5	...	1·8	0	−0·20	0	...	0	−0·4	2·1	...	1	4	0	0	1	1	3	3	18	0	4	4	4	2	11	1	1	4	Udaipur
																													Madhya Bharat
2·7	...	2·6	0·06	...	0·06	25	0	...	1·1	...	1	1	2	2	1	1	1	2	20	1	3	1	2	0	0	2	13	9	Gwalior
1·9	+0·5	1·9	0·03	−0·23	0·03	25	0	−1·2	3·1	+1·0	1	1	6	6	4	1	0	0	12	3	5	1	0	1	3	10	4	4	Guna
2·1	+1·1	2·7	0	−0·20	0	...	0	−0·4	3·5	−0·5	1	9	2	1	0	3	3	2	10	1	5	2	0	0	3	10	2	3	Neemuch
2·1	...	3·2	0	...	0	...	0	...	4·9	...	6	8	1	0	3	4	8	1	0	0	8	4	0	2	10	5	2	0	Ratlam
1·6	...	1·8	0	−0·24	0	...	0	−0·5	3·4	−0·3	1	7	2	1	2	2	2	0	14	2	3	0	1	3	5	8	2	7	Indore
1·5	−0·3	1·3	0·03	−0·21	0·03	26	0	−0·8	3·8	+1·7	0	6	2	1	1	5	5	3	8	2	6	2	1	2	9	6	3	0	Bhopal
1·5	−0·3	1·5	0·04	−0·20	0·04	7	0	−0·3	6·1	+1·0	3	6	1	4	4	6	0	1	6	6	5	0	0	2	5	4	5	4	Bairagarh
2·9	...	2·4	0·16	...	0·16	25	1	...	3·4	...	1	1	1	2	1	12	0	4	9	5	8	1	1	0	2	2	9	3	Malhosgar
																													Vindhya Pradesh
2·1	−0·1	2·0	1·34	+0·75	0·71	25	3	+0·5	1·9	+0·8	0	2	3	1	0	16	1	0	8	0	9	2	2	0	3	0	8	7	Nowgong
1·2	−0·8	1·6	1·82	+0·99	1·82	26	1	−0·8	2·4	+0·3	0	1	3	1	4	4	6	3	9	5	1	3	1	1	3	8	5	4	Sutna
1·3	+0·2	1·5	0·24	−0·77	0·19	27	1	−1·1	2·2	+0·1	0	0	2	3	0	1	0	0	25	5	3	0	0	0	3	4	5	11	Umaria
																													Madhya Pradesh East
0·3	...	0·5	0	...	0	...	0	...	1·9	...	6	7	5	3	3	2	0	1	4	2	0	1	1	1	5	4	3	14	Gondia
0·7	−1·1	1·1	0·04	−0·18	0·03	27	0	−1·7	3·5	+0·7	10	1	1	0	6	3	1	1	8	7	1	0	1	9	3	2	8	0	Pendra
0·4	...	0·5	0	...	0	...	0	...	3·0	...	16	2	1	0	0	0	1	8	3	3	2	1	0	0	2	9	6	6	Champa
0·6	−0·9	0·8	0	−0·37	0	...	0	−0·8	3·0	...	3	7	1	1	2	4	1	0	12	2	6	1	0	1	4	3	4	10	Raipur
0·6	−1·2	1·1	0	−0·20	0	...	0	−0·5	0·8	−1·0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	1	30	Kanker
0·6	−1·0	1·3	0	−0·31	0	...	0	−0·5	1·7	+0·1	1	2	0	8	0	0	0	1	19	0	1	0	8	0	0	0	0	22	Chanda
0·5	−1·4	1·2	0	−0·39	0	...	0	−0·7	1·9	+0·6	0	3	1	3	0	0	0	1	23	1	6	1	9	1	0	0	6	7	Jagdalpur
																													Madhya Pradesh West
1·2	...	1·7	0·02	...	0·02	26	0	...	5·5	...	1	2	1	4	9	5	1	8	0	2	6	1	1	5	6	0	10	0	Buldhana
1·8	−1·0	1·1	0	−0·30	0	...	0	−0·6	3·3	+0·6	0	0	6	7	5	2	0	1	10	4	7	0	4	3	3	5	4	1	Akola
0·8	−0·9	1·2	0	−0·37	0	...	0	−0·8	5·1	+1·5	0	29	0	0	0	1	0	1	0	0	8	0	10	0	7	0	6	0	Amravati
0·7	...	0·9	0	...	0	...	0	...	6·3	...	2	1	9	6	4	3	3	1	2	4	6	4	5	5	2	3	2	0	Yeotmal
1·3	−0·2	2·1	0	−0·31	0	...	0	−0·6	3·5	+0·8	1	4	6	2	4	1	2	2	9	6	3	3	2	4	3	2	5	3	Khandwa
2·1	+0·4	2·1	0·03	−0·37	0·03	26	0	−0·9	2·0	+0·1	0	6	9	3	0	0	0	1	12	0	0	1	1	2	3	2	0	22	Hoshangabad
1·9	+0·1	2·3	1·25	+0·68	1·25	26	1	−0·3	8·8	+0·5	1	2	6	7	5	4	5	1	0	3	4	4	3	1	6	6	2	2	Sagar
0·8	−1·0	0·8	0	−0·82	0	...	0	−1·7	2·5	+1·1	0	0	0	14	3	0	1	0	13	3	4	1	1	3	4	3	0	12	Jabalpur
0·6	−1·0	1·5	0·72	+0·17	0·72	24	1	−0·2	3·1	+0·8	3	2	1	0	0	0	0	0	25	5	3	1	10	3	4	0	0	0	Seoni

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean (830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure from normal	Mean 1730
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Madhya Pradesh West *(Contd.)*																						
Chhindwara ...	2,248	938·1	...	935·3	80·8	...	86	30,31	50·6	...	41	11	57·0	77·5	51·8	59·7	11·0	...	10·3	70	...	
Betul ...	2,144	941·7	...	938·7	81·1	...	87	30	51·8	...	42	11	59·8	75·3	53·7	60·0	11·7	...	11·6	67	...	
Nagpur ...	1,010	980·1	-1·4	976·5	85·5	+1·8	93	31	55·0	-1·0	46	11	62·4	82·0	56·5	64·2	12·5	+1·5	13·1	65	+11	
Gujarat																						
Deesa* ...	466	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Surat ...	39	1013·7	-0·9	1010·1	88·1	+1·3	96	29	60·2	+2·4	55	5	63·5	82·1	58·9	69·1	14·9	+2·6	18·4	75	+16	
Ahmedabad ...	163	1009·2	-1·8	1006·1	83·8	-1·0	92	29	61·1	+3·5	56	3	62·3	81·3	54·1	63·2	10·6	+2·0	11·7	55	+11	
Dohad ...	1,093	976·7	...	973·6	83·6	-0·5	91	24	56·0	+4·0	48	3	59·4	80·5	53·2	62·5	11·1	+1·7	11·2	64	+3	
Baroda ...	115	1010·5	...	1007·1	87·0	+0·7	96	29	54·8	+5·2	48	3,4	58·3	83·3	54·7	66·7	13·0	+3·5	14·2	79	+21	
Saurashtra & Kutch																						
Bhuj ...	343	1003·3	-1·4	1000·7	79·8	+0·4	87	29	53·9	+1·6	44	5	56·0	77·2	51·1	58·5	10·6	+0·8	8·4	68	+22	
Dwarka ...	37	1013·7	-1·7	1011·7	78·2	+0·3	83	28	63·4	+3·9	54	6	65·3	74·6	59·5	63·3	14·8	+1·0	14·7	69	+2	
Jamnagar ...	60	1012·8	-2·0	...	78·0	-1·1	85	29	56·6	+4·2	51	6	60·3	...	54·3	...	11·7	+0·8	...	66	+5	
Rajkot ...	432	999·4	-1·7	996·4	83·5	+0·2	91	29	54·9	+3·9	45	6	58·2	80·5	52·5	62·5	10·9	+2·6	11·2	67	+17	
Veraval ...	26	1013·7	-1·4	1011·1	81·5	...	89	10	58·3	...	53	4,15	62·3	76·9	56·6	69·5	13·1	...	21·2	68	+18	
Bhavnagar ...	55	1012·9	-1·7	1009·7	84·8	+0·8	93	29	56·8	+2·8	50	5	59·1	81·5	52·8	64·1	10·9	+2·2	12·5	63	+17	
Konkan																						
Dahanu ...	15	1013·2	...	1011·0	80·9	...	91	11	62·6	...	59	6,16,17	65·0	76·5	62·6	71·9	18·3	...	24·7	85	...	
Bombay ...	35	1012·7	-1·0	1010·0	83·8	+0·6	91	11	67·2	+0·5	62	5	71·7	78·2	65·8	70·2	19·0	+0·7	21·6	72	+2	
Alibag ...	23	1013·6	-0·4	...	82·4	-0·2	92	11	64·3	+0·8	60	13	68·8	...	64·2	...	18·5	+2·5	...	77	+12	
Harnai ...	66	1010·9	...	1008·8	80·2	...	98	11	70·1	...	65	18	73·1	77·2	66·5	72·3	19·3	...	24·8	70	...	
Devgad ...	117	1009·6	...	1005·8	83·2	...	91	9,12	68·3	...	66	6 days	70·4	81·4	65·4	72·2	19·1	...	22·9	76	...	
Vengurla ...	29	1012·1	...	1008·8	88·2	...	95	12	64·0	...	58	2	68·9	82·4	64·6	71·1	18·8	...	20·8	79	...	
Marmagao ...	202	1005·2	-1·2	1002·7	83·4	-2·5	91	12	69·2	-1·1	66	3	73·2	80·4	67·0	72·0	19·9	+0·5	23·0	72	+6	
Honavar ...	85	1010·7	...	1006·9	88·0	...	95	12,29	67·6	...	62	3	72·7	83·8	66·0	73·4	18·9	...	23·3	70	...	
Deccan (Desh)																						
Jalgaon ...	660	991·9	...	988·4	87·9	...	94	24,25	...	...	...	...	61·4	85·1	54·6	64·8	11·5	...	11·8	62	...	
Malegaon ...	1,432	965·4	-1·0	961·2	87·6	+1·4	93	25,31	53·9	+1·5	47	3	61·2	84·2	53·4	63·9	10·5	+1·3	11·1	57	+5	
Deolali ...	1,874	949·7	...	...	84·7	...	91	30	51·1	...	44	16	60·9	...	53·8	...	11·3	...	...	62	...	
Ahmednagar ...	2,154	940·6	-1·4	937·0	87·6	+3·1	93	29	54·1	+0·9	47	12	61·5	84·7	53·8	62·0	11·1	+1·2	9·8	58	+11	
Poona ...	1,834	951·4	-1·1	947·6	87·9	+1·4	93	25,30	53·4	+0·4	46	12	58·1	83·6	53·8	63·4	12·4	+1·6	11·8	75	+9	
Sholapur ...	1,570	960·4	-1·1	956·6	89·1	+1·7	94	30,31	58·9	-0·4	50	13	67·1	86·4	57·0	65·8	11·9	+0·9	13·3	52	+4	
Miraj ...	1,817	951·7	-1·6	947·6	88·8	+2·6	93	23,30,31	55·8	-1·8	48	3	61·6	86·4	53·5	63·8	10·7	-1·9	11·1	58	-1	
Kolhapur ...	1,885	949·7	...	945·9	87·6	...	92	24,25,31	56·5	...	51	3,4,13	51·1	84·9	55·1	62·3	12·4	...	10·0	68	...	
Bijapur ...	1,950	947·2	-1·4	943·8	86·5	+0·3	93	31	59·6	-0·6	51	11,13	66·7	85·0	56·7	63·5	11·7	-1·7	11·3	52	-8	
Belgaum ...	2,562	927·3	-0·8	923·7	84·6	+0·7	89	24	56·5	-1·2	51	4 days	64·2	83·3	56·6	61·3	12·6	-0·1	9·6	62	0	
Gadag ...	2,131	941·1	-1·4	937·9	87·6	+2·3	92	23,31	61·4	-0·1	56	8	70·4	84·5	59·3	63·3	12·7	-1·3	11·3	50	-12	
Hyderabad, North																						
Aurangabad ...	1,905	949·5	-1·2	946·2	86·1	+1·4	92	30	56·8	+0·1	49	12,13,14	62·1	84·1	53·4	61·5	10·5	+0·7	9·5	56	+9	
Parbhani ...	1,350	967·0 (1)	...	963·2 (m)	87·1 (1)	...	92	30,31	55·8 (1)	...	42	13	64·3 (1)	84·3 (m)	56·3 (1)	65·8 (m)	11·9 (1)	...	13·3 (m)	51 (1)	...	
Ramagundam ...	527	997·9	...	993·9	85·9	...	91	19	57·4	...	49	13	65·1	82·4	59·4	63·9	14·8	...	12·0	69	...	
Nizamabad ...	1,250	970·7	-1·8	967·4	86·7	+0·5	92	31	58·0	+0·4	44	13	62·5	84·9	57·3	62·9	13·7	-0·4	9·7	72	+9	
Bidar ...	2,178	939·9	...	936·9	83·8	0	89	1	61·5	-0·6	58	11	67·2	81·3	58·7	62·6	13·4	-0·1	11·8	59	0	

* Data not reliable. (1) Mean of 19 days. (m) Mean of 18 days.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Madhya Pradesh West *(Contd.)*
1·5	...	1·4	0·02	...	0·01	23,27	0	...	2·8	...	3	2	2	0	0	0	2	3	19	1	4	1	0	7	8	5	3	2	Chhindwara
1·7	...	2·1	0·16	...	0·16	26	1	...	3·0	...	0	1	3	9	2	1	1	0	9	5	8	2	2	3	1	4	4	2	Betul
1·9	−1·1	1·4	0	−0·37	0	0	0	−0·8	2·7	...	9	5	4	1	0	0	0	3	9	0	2	12	5	3	4	2	0	3	Nagpur
																													Gujarat
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Deesa *
·1	−0·1	1·1	0	−0·11	0	...	0	−0·2	3·3	+0·5	4	8	3	4	0	0	0	1	11	0	2	0	3	0	10	2	11	3	Surat
·0	−0·3	1·6	0	−0·02	0	...	0	−0·1	3·5	−0·2	4	11	7	0	0	1	2	3	3	2	3	3	1	1	5	6	6	4	Ahmedabad
·4	−0·1	1·3	0	−0·09	0	...	0	−0·2	5·8	+3·3	1	5	5	6	3	5	3	0	4	1	3	2	1	5	10	5	0	4	Dohad
·6	−0·4	1·0	0	−0·06	0	...	0	−0·1	1·6	−1·1	2	5	0	1	1	0	0	0	22	1	2	0	0	0	5	5	2	16	Baroda
																													Saurashtra & Kutch
·4	+0·1	1·0	0	−0·08	0	...	0	−0·2	2·6	−1·5	0	0	0	0	1	4	0	0	26	7	6	0	0	1	3	6	6	2	Bhuj
·8	+0·2	1·3	0·14	+0·04	0·14	19	1	+0·7	9·1	+0·9	7	12	5	0	0	1	4	2	0	7	4	0	0	0	2	6	12	0	Dwarka
·4	+0·4	...	0	−0·05	0	...	0	−0·1	1·7	−4·3	0	2	1	0	1	0	0	0	27	...	...	...	...	...	...	...	...	...	Jamnagar
·3	−0·2	1·6	0	−0·04	0	...	0	−0·1	6·1	+2·0	4	5	5	4	2	1	1	0	9	7	6	1	0	2	2	5	8	0	Rajkot
·8	+0·7	0·9	0	−0·04	0	...	0	−0·1	9·0	...	13	15	0	0	0	0	0	1	2	1	1	0	0	3	2	14	10	0	Veraval
·6	−0·8	1·6	0	−0·09	0	...	0	−0·1	3·7	+0·1	1	0	0	0	3	4	15	2	6	0	4	18	4	3	0	1	0	1	Bhavnagar
																													Konkan
·5	...	0·6	0	...	0	...	0	...	7·2	...	1	4	17	9	0	0	0	0	0	12	0	0	0	0	0	6	13	0	Dahanu
·8	−0·5	0·5	0	−0·14	0	...	0	−0·2	5·6	−1·0	2	8	12	4	1	0	0	0	4	10	1	0	0	0	0	2	18	0	Bombay
·0	−0·5	...	0	−0·05	0	...	0	−0·2	2·7	−1·9	1	11	6	0	0	0	0	0	13	...	...	...	...	...	...	...	...	...	Alibag
·3	..	0	0	...	0	...	0	...	9·3	...	8	5	13	2	0	0	0	3	0	0	1	0	0	0	0	3	0	0	Harnai
·0	...	0·4	0	...	0	...	0	...	9·7	...	1	13	17	0	0	0	0	0	0	0	1	1	0	0	0	9	20	0	Devgad
·5	...	0·4	0	...	0	...	0	...	...	...	4	6	3	0	0	0	0	0	18	1	1	1	0	0	1	20	3	4	Vengurla
·0	−0·5	1·1	0	0	0	....	0	0	6·7	+1·1	3	9	18	1	0	0	0	0	0	0	1	1	0	0	1	15	13	0	Marmagao
·1	...	0·7	0	−0·05	0	...	0	−0·1	2·6	...	0	2	21	4	0	0	0	0	4	0	1	1	0	0	0	16	10	3	Honavar
																													Deccan (Desh)
·8	...	1·2	0	−0·05	0	...	0	−0·1	3·3	...	0	1	9	5	1	8	1	1	5	3	4	2	3	0	3	4	9	3	Jalgaon
·3	−1·1	1·3	0	−0·17	0	...	0	−0·3	3·0	−0·6	0	0	0	0	0	0	0	0	31	0	5	1	1	0	4	3	1	16	Malegaon
·3	...	...	0	...	0	...	0	...	3·1	...	2	5	1	0	1	1	0	0	21	...	...	...	...	...	...	...	...	...	Deolali
·5	−0·8	0·7	0	−0·21	0	...	0	−0·4	3·4	−0·3	1	0	0	3	0	0	1	4	22	1	1	2	4	2	5	2	3	11	Ahmednagar
·6	−0·8	0·7	0	−0·06	0	...	0	−0·2	1·7	−2·0	0	0	2	0	1	2	5	0	21	0	0	5	2	0	2	11	4	7	Poona
·5	−0·8	0·7	0	−0·15	0	...	0	−0·3	3·7	−2·0	0	6	1	6	6	0	0	0	12	0	2	3	6	3	0	0	0	17	Sholapur
·6	−1·1	1·3	0	−0·01	0	...	0	−0·1	4·7	+0·3	2	7	9	1	1	0	4	4	3	0	3	12	4	3	2	5	1	1	Miraj
·3	...	0·3	0	...	0	...	0	...	5·6	...	5	0	0	0	0	0	0	0	26	3	3	10	1	0	1	12	0	1	Kolhapur
·6	−0·9	0·9	0	−0·18	0	...	0	−0·2	3·1	+0·3	4	2	2	7	4	1	0	3	8	1	6	7	6	4	3	1	0	3	Bijapur
·4	−1·1	0·5	0	−0·12	0	...	0	−0·2	3·1	+0·3	0	1	1	1	0	0	0	0	28	0	0	31	0	0	0	0	0	0	Belgaum
·5	+0·1	1·8	0	−0·17	0	...	0	−0·2	4·6	0	0	5	11	6	0	0	0	1	8	0	7	11	5	0	0	0	1	7	Gadag
																													Hyderabad North,
·0	−0·6	1·8	0	−0·29	0	...	0	−0·5	4·3	−0·3	0	7	15	4	0	0	0	0	5	0	1	6	1	5	7	9	2	0	Aurangabad
·0	...	1·1	0	−0·36	0	...	0	−0·7	...	...	0	24	1	0	0	0	4	0	2	0	16	2	2	1	0	6	0	4	Parbhani
1)		(m)							(1)																				
·7	...	0·8	0	...	0	...	0	...	2·8	...	4	5	1	2	0	0	0	3	4	3	7	3	2	1	0	0	0	2	Ramagundam
·2	−1·2	0·4	0	−0·20	0	...	0	−0·4	2·3	+0·2	0	0	0	0	1	0	0	0	30	6	6	5	0	0	0	2	1	11	Nizamabad
·7	−1·7	1·0	0	−0·22	0	...	0	−0·5	6·6	+0·2	1	4	3	7	6	6	1	2	1	0	12	6	4	1	3	1	4	0	Bidar

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hyderabad, South																						
Gulbarga ...	1,503	962·5	-1·4	958·6	87·3	0	92	30,31	58·8	-1·2	53	13	66·7	85·4	58·3	63·3	12·8	+0·2	9·4	59	+3	25
Raichur ...	1,311	969·2	-1·1	965·6	82·2	-0·6	91	31	63·8	-0·9	60	11,12,20	68·8	84·5	60·9	65·6	14·7	-1·3	13·0	63	-1	32
Hyderabad (Begumpet) ...	1,778	953·8	-0·9	95·5	86·3	-1·6	92	31	55·3	-3·4	47	12,13	64·0	81·3	58·0	63·4	14·0	-1·7	12·7	69	-6	35
Hanamkonda ...	881	984·4	-1·5	980·9	85·8	+0·8	93	31	61·3	-0·6	52	12	68·6	82·3	62·7	64·5	16·8	-0·8	12·7	70	-3	34
Khammameth ...	367	1002·2	...	998·5	87·3	...	95	31	...	...	...	...	67·5	85·9	66·0	75·7	21·1	...	25·7	91	...	61
Coastal Andhradesa																						
Nellore ...	66	1012·6	-1·2	1009·5	86·6	+1·4	92	31	64·9	-2·6	62	5 days	70·3	79·3	66·8	69·7	20·8	-2·4	20·5	83	-1	60
Ongole ...	38	1013·9	...	1010·6	84·6	...	89	31	65·1	...	62	20	71·0	79·3	66·6	69·3	20·3	...	19·9	76	...	59
Masulipatam ...	10	1015·2	-0·9	1011·7	82·1	-0·9	86	31	65·2	-0·8	62	4,12,15	72·6	78·3	68·5	71·3	22·0	-0·2	23·0	81	-2	70
Kakinada ...	26	1015·1	-0·5	1011·3	83·1	+2·0	91	31	65·5	-0·9	61	12	75 5	78·5	68·5	70·1	20·7	+0·4	21·3	68	-7	64
Visakhapatnam ...	126	1011·1	-1·1	1007·9	80·8	+0·2	83	4,24,31	65·5	-1·9	60	12	71·6	77·1	65·4	68·5	18·6	-1·2	19·9	70	-1	63
Calingapatam ...	19	1014·8	-1·4	1011·5	82·6	+0·8	87	5 days	62·3	-1·2	56	11	65·5	77·9	63·3	70·3	18·9	-0·4	21·7	82	+2	67
Rentachintala ...	348	1003·1	...	998·9	87·3	+0·1	91	3,29,30	61·3	-0·4	55	11	68·8	86·4	62·5	66·3	10·5	-0·8	13·0	69	0	30
Rayalaseema																						
Cuddapah ...	428	1000·0	-0·9	996·1	88·2	+0·1	92	30,31	65·5	-0·2	62	18	75·8	82·2	67·8	70·1	19·6	-0·6	19·7	64	-10	52
Bellary ...	1,473	963·5	-1·1	959·8	86·7	-1·1	90	30	62·2	-0·3	58	13	67·7	84·3	60·1	64·4	14·3	-1·0	11·7	62	-2	30
Kurnool ...	923	982·8	-0·9	978·5	88·3	-0·1	94	31	59·9	-1·7	54	13	67·3	86·0	60·5	65·5	14·9	-1·4	12·2	65	-4	30
Anantapur ...	1,147	974·7	...	970·5	86·3	...	91	31	59·8	...	55	14	69·4	84·1	61·6	65·0	15·2	...	12·5	62	...	32
Tamilnad																						
Pamban ...	37	1012·2	-0·6	1008·9	81·1	-1·5	83	5 days	74·5	0	69	3	77·3	78·3	71·7	71·9	24·1	-2·9	23·8	74	-9	72
Mathurai ...	437	998·9	-0·9	994·5	86·8	+1·0	90	28	67·2 (a)	-1·2	61	1,18	74·0	84·1	67·7	69·7	20·3	-2·1	18·3	70	-9	47
Nagapattinam ...	31	1013·2	-0·3	1010·1	81·0	-1·3	83	27	71·6	-0·2	63	2	75·6	78·5	69·8	71·5	22·2	-2·1	23·2	74	-5	69
Tiruchi ..	295	1004·4	-0·8	1000·1	87·1	+0·2	90	28,31	66·3	-1·9	61	1,17	73·0	83·6	67·7	69·6	20·7	-2·2	18·3	75	-5	47
Coimbatore ...	1,341	968·1	-0·8	963·8	87·2	+1·2	90	20,21,31	65·7	+0·8	62	1,17 18	70·0	85·5	64·5	67·7	18·2	-2·4	14·6	73	-7	35
Salem ...	913	982·8	-0·9	911·1	87·9	+1·8	94	31	65·4	+0·4	60	1,2,17	70·2	86·2	63·1	67·1	16·5	-3·7	14·1	66	-10	33
Kallakurichi ...	416	1000·2	...	995·9	86·2	...	89	4 days	65·2	...	59	17	71·1	83·4	65·3	67·3	18·7	...	15·8	72	...	40
Cuddalore ...	39	1013·1	-0·7	1009·8	82·2	-0·5	84	7	63·3	-2·6	61	1	72·8	78·7	68·4	71·2	21·7	-2·4	22·7	80	-4	68
Vellore ...	703	990·7	-0·4	986·5	85·2	+1·3	90	31	61·5	-2·7	56	17,19	68·1	82·0	63·7	67·0	18·2	-2·6	15·8	77	-9	43
Madras ...	51	1013·2	-0·5	1010·0	83·7	-1·6	87	2,31	66·2	-0·9	62	19	72·2	78·8	67·5	69·1	20·9	-2·9	19·9	78	-6	60
Arogyavaram ...	2,299	936·6	...	933·2	80·1	...	85	22	57·8	...	54	14,18	65·0	78·1	60·2	61·9	15·9	...	12·6	76	...	38
Malabar And South Kanara																						
Mangalore ...	72	1010·5	-0·9	1006·9	87·2	-1·9	94	30	70·7	+0·1	67	4 days	74·7	82·2	68·7	73·6	21·3	+0·8	24·8	73	+5	65
Kozhikode ..	27	1011·7	-0·9	1007·9	88·9	+1·0	91	4 days	70·5	-0·4	67	6,8	75·3	85·7	69·5	75·3	22·0	-0·9	25·2	73	-5	60
Palghat ...	319	1002·3	...	997·4	92·6	...	96	31	70·7	...	64	18	76·0	89·9	67·5	69·9	19·1	...	15·9	62	...	33
Mysore																						
Chitaldrug ...	2,405	931·7	-1·4	928·5	83·5	-1·3	89	23	62·0	-0·6	58	8	68·0	82·3	59·1	62·1	13·5	-1·8	10·9	58	-4	30
Hassan ...	3,149	908·3	...	904·9	82·7	-0·1	87	23	56·4	-0·6	51	1	61·1	80·9	56·7	63·3	14·0	-1·8	12·7	77	+5	36
Bangalore ...	3,021	912·5	-0·7	909·2	80·9	+0·6	85	31	57·7	+0·4	53	14	63·4	77·3	58·1	59·3	14·3	-1·8	10·0	72	-6	32
Mysore ...	2,518	928·6	-0·9	924·9	83·4	-0·8	87	21,23	60·7	-0·1	54	18	65·8	82·5	60·1	61·9	15·4	-1·2	10·5	71	0	28

(a) Mean of 30 days.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
0830 hrs. IST	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Hyderabad South,
·7	-0·6	0·4	0	-0·21	0	...	0	-0·3	5·3	+0·6	0	8	12	2	1	4	0	0	4	0	3	11	9	6	1	1	0	0	Gulbarga
·9	-0·6	0·8	0	-0·13	0	...	0	-0·2	5·6	+0·3	3	4	5	12	1	0	0	4	2	3	7	9	10	1	0	0	1	0	Raichur
·3	-1·9	0·5	0	-0·31	0	...	0	-0·5	3·7	+0·5	1	0	1	1	0	0	0	1	27	1	8	12	5	0	0	1	0	4	Hyderabad (Begumpet)
·8	-1·8	0·9	0	-0·40	0	...	0	-0·7	4·0	+0·4	1	1	0	10	10	1	1	0	7	5	7	2	7	6	0	0	0	4	Hanamkonda
·4	...	1·3	0	...	...	...	...	...	2·2	...	0	3	12	0	0	0	0	0	16	0	1	14	4	4	1	0	0	7	Khammameth
																													Coastal Andhra desa
7	-1·7	0·9	0	-1·31	0	...	0	-1·4	2·1	-0·7	1	0	0	0	0	0	0	1	29	0	3	19	4	0	0	0	0	5	Nellore
5	...	0·9	0	...	0	...	0	...	3·6	...	5	3	0	0	0	3	4	1	15	0	0	8	22	1	0	0	0	0	Ongole
5	-0·4	1·5	0	-0·20	0	...	0	-0·3	4·8	+0·9	13	9	1	0	0	1	0	3	4	0	0	3	23	5	0	0	0	0	Masulipatam
5	-2·2	0·3	0	-0·28	0	...	0	-0·5	5·8	+0·3	0	11	0	0	0	4	0	15	1	0	2	1	24	0	4	0	0	0	Kakinada
1	-1·5	0·6	0	-0·43	0	...	0	-0·5	3·5	+0·6	1	5	0	0	0	0	13	7	5	0	3	7	7	12	2	0	0	0	Visakhapatnam
5	-0·4	1·3	0	-0·22	0	...	0	-0·6	6·0	+1·2	2	0	0	0	0	0	14	15	0	0	1	7	8	9	6	0	0	0	Calingapatam
3	-2·3	1·3	0	-0·01	0	...	0	0	3·1	-0·2	0	0	5	3	6	0	2	0	15	3	3	11	6	4	0	0	0	4	Rentachintala
																													Rayalaseema
3	-0·9	1·1	0	-0·39	0	...	0	-0·6	5·7	-0·9	0	0	5	1	0	0	0	0	25	0	0	22	2	0	0	0	0	7	Cuddapah
1	0	1·6	0	-0·10	0	...	0	-0·3	2·3	-0·4	0	0	0	6	0	0	0	2	23	0	0	9	12	0	0	0	0	10	Bellary
4	-1·3	0·6	0	-0·15	0	...	0	-0·3	2·8	-0·1	0	1	4	0	2	0	0	0	15	1	3	9	11	1	0	0	0	6	Kurnool
)	...	0·9	0	-0·24	0	...	0	-0·3	6·2	...	1	0	8	7	3	1	1	0	10	0	7	22	1	0	0	0	1	0	Anantapur
																													Tamilnad
)	+0·2	2·4	2·10	-0·47	1·82	10	2	-2·0	11·4	+1·6	11	12	4	0	0	0	0	4	0	10	19	2	0	0	0	0	0	0	Pamban
	-0·4	2·8	0	-0·78	0	...	0	-1·5	3·8	-0·7	13	4	1	0	0	0	0	6	7	2	15	13	1	0	0	0	0	2	Mathurai
)	+0·7	3·4	1 11	-1·62	0·75	10	2	-1·0	11·0	+3·1	2	14	3	0	0	0	1	9	2	1	27	3	0	0	0	0	0	0	Nagapattinam
	-0·2	2·1	0·01	-0·98	0·01	11	0	-1·7	5·1	-0·3	10	18	1	0	0	0	0	1	1	0	5	26	0	0	0	0	0	0	Tiruchi
	-0·6	1·5	0	-0·63	0	...	0	-1·1	4·4	+1·8	9	15	6	0	0	0	0	0	1	4	15	11	1	0	0	0	0	0	Coimbatore
	-0·8	1·6	0	-0·29	0	...	0	-0·7	6·7	+2·8	0	0	29	1	0	0	1	0	0	0	1	24	3	0	0	0	0	3	Salem
	...	6·9	0·07	...	0·07	10	0	...	...	...	16	6	0	0	0	0	0	4	5	0	31	0	0	0	0	0	0	Kallakurichi
	+1·0	3·0	0·06	-2·29	0·06	10	0	-2·4	5·9	+1·4	14	9	0	0	0	0	1	7	0	0	27	1	3	0	0	0	0	0	Cuddalore
	-0·2	1·6	0·02	-1·43	0·02	11	0	-2·1	3·6 (b)	+1·2	0	0	1	0	0	0	0	0	30	0	10	20	0	0	0	0	0	1	Vellore
	0	2·3	0·41	-1·00	0·37	10	1	-0·7	8·7	-2·3	5	5	2	1	0	0	4	14	0	1	16	11	3	0	0	0	0	0	Madras
	...	2·1	0	...	0	...	0	...	3·5	...	1	2	1	9	6	0	0	0	12	0	10	17	2	0	0	0	0	2	Arogyavaram
																													Malabar And South Kanara
	-1·3	1·0	0	-0·11	0	...	0	-0·2	5·4	+0·6	0	3	26	1	0	0	0	0	1	4	0	0	0	0	3	12	12	0	Mangalore
	+0·1	2·5	0	-0·35	0	...	0	-0·6	6·8	+1·6	0	13	16	2	0	0	0	0	0	0	0	0	0	0	1	16	14	6	Kozhikode
	...	1·2	0	...	0	...	0	...	7·0	...	0	0	29	2	0	0	0	0	0	0	3	21	4	0	0	1	2	0	Palghat
																													Mysore
	-1·3	1·0	0	-0·25	0	...	0	-0·3	4·5	-0·1	0	1	17	4	0	0	0	0	9	0	3	25	0	0	0	1	0	2	Chitaldrug
	-0·9	1·8	0	-0·17	0	...	0	-0·3	4·0	+0·9	0	2	14	8	0	1	0	0	6	0	3	18	7	0	0	0	0	3	Hassan
	-0·5	1·2	0	-0·24	0	...	0	-0·5	6·5	+1·4	0	6	17	4	1	3	0	0	0	1	9	17	3	1	0	0	0	0	Bangalore
	-0·7	1·6	0	-0·14	0	...	0	-0·3	7·1	+1·2	0	8	12	0	2	0	2	0	7	5	11	15	0	0	0	0	0	0	Mysore

(b) Mean of 29 days.

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Highest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
Travancore Cochin																						
Fort Cochin ...	10	1012·4	−0·6	1008·3	86·7	−0·2	91	22	72·5	−1·0	69	18	77·5	82·6	70·1	73·9	21·8	−0·2	24·6	64	−6	6
Alleppey ...	12	1012·0	...	1008·1	89·6	...	95	12	71·5	...	68	6,18	79·0	84·1	72·0	75·9	23·6	...	26·8	70	...	6
Trivandrum ...	211	1005·0	−0·6	1001·7	88·5	...	92	7,10,13	70·7	...	66	18	75·7	84·1	69·4	73·1	21·7	−1·9	22·8	71	−6	5
Nagercoil ...	195	1005·6	...	1002·0	91·1	...	95	28	72·9	...	67	3	78·5	85·2	68·1	71·8	18·8	...	20·4	57	...	5
Hill Stations Excluding Kashmir																						
Aijal ...	3,599	...	...	...	66·4	...	75	28	53·8	...	50	2	58·9	61·0	55·4	56·9	13·6	...	14·3	80	...	7
Shillong ...	4,921	851·2	−1·5	849·2	60·3	+0·2	65	27	38·5	−0·3	33	2	52·7	51·9	45·2	49·1	7·3	−1·4	10·6	56	−14	8
Cherrapunji ...	4,309	870·8	−0·8	868·6	60·5	+0·2	66	27	45·4	−0·6	41	2,8	55·8	53·2	48·3	49·6	8·5	−1·3	10·8	58	−5	7
Darjiling ...	7,432	776·1	−0·9	773·9	49·8	+2·8	56	13,14,15	35·6	+0·2	32	16,17	42·4	40·5	40·1	39·4	7·5	+0·4	7·8	83	+8	9
Kalimpong ...	3,965	880·7	−2·4	878·8	61·0	+1·6	65	12	45·8	−0·4	43	11	49·4	53·1	47·0	49·2	10·0	−0·1	10·7	83	+8	7
Katmandu ...	4,388	869·9	...	866·7	65·0	+0·4	71	22	35·6	−0·6	30	8	40·5	54·2	39·6	48·4	7·8	+0·9	9·1	93	+8	6
Muktesar ...	7,592	771·7	−1·4	770·7	51·9	+2·1	60	12.13	37·4	+1·9	32	3,27	41·9	44·7	34·2	38·5	4·0	−0·3	5·8	48	−1	6
Mussooree ...	6,699	796·5	...	795·0	52·8	+3·3	65	12	39·0	+2·1	33	27	43·7	45·1	39·6	42·6	6·9	+1·9	8·4	69	+13	6
Simla ...	7,224	781·0	−0·8	780·3	48·7	+1·2	61	13	35·6	+0·2	25	2	41·2	43·7	33·5	38·3	3·8	−0·3	5·9	48	+5	6
Abu ...	3,945	881·9	−1·3	880·2	67·1	+1·2	74	24	50·3	−0·4	41	3	54·2	62·9	47·3	51·1	8·4	+2·5	8·1	59	+15	4
Pachmarhi ...	3,528	896·6	−1·2	894·6	74·1	+2·1	79	23,30	48·9	+1·2	37	3	59·9	70·1	53·0	57·9	10·8	+1·0	11·4	66	0	4
Mahabaleshwar ...	4,534	864·4	−1·1	862·8	77·1	+2·7	83	28,29	57·5	+0·4	51	3	61·5	70·3	52·0	58·8	9·5	+0·1	12·3	49	−3	4
Mercara ...	3,781	886·2	−1·7	884·4	77·6	+0·5	82	15	56·5	−0·7	52	6	62·2	74·8	56·8	61·5	13·6	−1·6	13·3	72	−6	4
Kodaikanal ...	7,688	771·9	−0·2	770·5	63·5	+1·3	70	21	45·4	−1·2	37	7	54·2	55·3	41·7	50·1	4·6	−3·2	10·4	35	−20	7
Ootacamund ...	7,364	780·7	−0·5	779·2	70·0	+4·1	74	4 days	39·9	−3·1	33	3	51·5	61·6	43·9	52·7	7·0	−0·6	10·4	50	−8	5
Coonoor ...	5,730	827·1	...	...	64·5	−1·7	73	22	43·2	−3·8	37	5	60·5	...	51·9	...	10·1	−0·3	...	60	−5	
Tibet																						
Lhasa ...	12,090	625·6	...	...	44·8	...	57	20	13·1	...	6	2	26·0	...	24·9	...	4·1	...	...	88	...	
Gyantse ...	13,110	623·0	...	...	43·5	+1·2	54	20,21	7·2	−0·7	−4	8	24·1	...	19·3	...	2·0	−1·1	...	50	−14	
Ceylon																						
Colombo ...	24	1011·4	−0·6	1007·7	87·5	+0·6	93	28	70·0	−1·9	59	4	74·4	82·5	70·4	74·5	23·6	−1·5	25·6	81	−4	6
Trincomalee ...	24	1012·3	−0·4	1009·5	79·6	−2·5	84	25	75·5	+0·9	67	3	77·5	78·7	72·2	72·7	24·6	−1·9	24·7	76	−7	7
Hambantota ...	61	1009·2	−1·0	1006·0	84·8	+6·1	87	6 days	71·5	−0·8	66	2,3	79·5	80·7	71·2	74·7	24·2	−0·7	26·6	80	−5	
Mannar ...	12	1013·1	...	1009·6	82·6	...	87	21	72·8	...	67	1,3	75·8	80·3	71·3	72·6	24·1	...	23·9	79	...	

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
4	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Travancore Cochin
·0	+2·1	4·0	0·10	−0·79	0·10	11	1	−0·1	5·3	+1·2	1	10	16	4	0	0	0	0	0	1	0	0	0	0	6	21	3	0	Fort Cochin
·0	...	0·5	0	...	0	...	0	...	5·0	...	0	4	13	12	1	0	1	0	0	0	0	0	0	0	0	17	14	0	Alleppey
·7	−0·9	2·2	0	−0·79	0	...	0	−1·7	3·5	+0·7	5	16	1	1	0	1	0	0	7	0	0	0	1	3	14	9	3	1	Trivandrum
·5	...	2·8	0	...	0	...	0	...	8·9	...	0	29	1	0	0	0	0	0	1	0	19	1	2	0	0	8	1	0	Nagercoil
																													Hill Stations Excluding Kashmir
·3	...	1·4	0·17	...	0·17	18	1	...	2·8	...	1	1	10	5	4	3	2	1	4	2	0	0	0	1	13	1	5	9	Aijal
·1	−0·4	5·6	0·26	−0·26	0·26	1	1	−0·1	2·1	+0·6	0	0	1	2	1	3	0	1	23	1	0	1	0	0	1	0	3	25	Shillong
·0	0	2·7	0·20	−0·55	0·15	18	1	−0·5	5·1	+1·6	0	12	11	0	3	3	1	1	0	1	6	0	0	1	11	7	3	2	Cherrapunji
·9	+0·5	3·9	0·19	−0·34	0·09	26	0	−1·2	3·9	+1·3	1	3	13	4	0	0	5	1	4	0	3	7	2	1	1	11	2	1	Darjiling
·2	+0·8	3·3	0	−0·41	0	...	0	−0·9	5·9	−0·8	1	0	0	2	0	0	3	19	6	0	0	0	27	3	0	0	1	0	Kalimpong
·3	+1·3	2·3	0·84	+0·46	0·59	26	3	+2·2	1·1	−0·1	1	0	2	2	0	1	0	1	24	4	1	0	1	1	0	0	5	19	Katmandu
·9	+0·8	4·2	2·82	+0·59	0·53	26	8	+4·4	7·8	+2·2	2	5	3	1	2	3	7	5	3	1	1	1	1	1	4	12	5	5	Muktesar
·3	+0·7	5·6	3·46	+0·75	1·05	20	7	+2·0	...	...	11	7	0	3	5	1	1	3	0	7	7	0	4	6	4	1	2	0	Mussooree
·5	+0·7	5·6	5·22	+2·61	2·21	20	9	+4·2	2·1	−1·6	3	3	1	6	10	0	0	0	8	2	2	3	5	8	3	0	1	7	Simla
·9	+0·2	1·8	0	−0·26	0	...	0	−0·6	2·2	−1·3	0	1	0	0	1	3	3	0	23	1	0	0	3	5	4	1	2	15	Abu
·9	−1·0	1·0	0·14	−0·50	0·11	26	1	−0·3	2·1	−0·3	0	1	0	1	6	6	3	2	12	5	2	0	0	0	3	8	5	8	Pachmarhi
·5	−0·5	0·5	0	−0·14	0	...	0	−0·2	5·3	−0·6	0	6	7	7	0	7	0	4	0	0	5	0	1	0	8	2	15	0	Mahabaleshwar
·1	−0·3	4·5	0·19	+0·03	0·19	23	1	+0·7	5·2	+1·2	13	13	5	0	0	0	0	0	0	12	12	2	0	0	0	4	1	0	Mercara
·5	−1·3	2·9	0·35	−2·84	0·23	10	1	−3·0	9·3	+0·7	1	13	11	5	1	0	0	0	0	1	6	3	9	3	0	0	3	6	Kodaikanal
·0	−1·2	1·9	0	−1·29	0	...	0	−1·8	0·6	−2·5	1	2	2	0	3	0	0	0	23	0	1	1	0	1	0	0	0	28	Ootacamund
·5	−1·8	...	0·03	−2·43	0·03	11	0	−2·7	3·0	−0·3	8	2	2	10	5	0	1	3	0	...	...	...	...	...	...	...	...	...	Coonoor
																													Tibet
·3	...	...	0	...	0	...	0	...	1·1	...	0	0	0	0	0	0	0	0	31	...	...	...	...	...	...	...	...	...	Lhasa
·8	−0·5	...	0	−0·01	0	...	0	0	3·3	−0·8	0	0	1	7	2	2	2	0	17	...	...	...	...	...	...	...	...	...	Gyantse
																													Ceylon
·4	−0·7	4·3	0·82	−2·97	0·51	11	2	−3·3	...	...	3	22	5	0	0	0	0	0	1	11	8	1	0	0	0	2	8	1	Colombo
·6	+0·3	4·4	2·36	−4·46	0·91	8	4	−4·1	..	..	3	23	1	1	0	0	0	0	3	13	16	1	0	0	0	0	0	1	Trincomalee
·7	+0·3	5·0	0·61	−3·34	0·32	19	3	−3·0	...	...	27	1	0	0	0	0	0	3	0	9	17	3	1	0	1	0	0	0	Hambantota
·8	...	3·5	2·02	...	1·50	9	3	...	...	...	2	22	6	0	0	0	0	0	1	10	18	3	0	0	0	0	0	0	Mannar

TABLE *III*.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 4TH CLASS STATIONS— JANUARY 1950

STATION	Maximum temperature, °F				Minimum temperature, °F				Mean dry bulb temperature 0830 hrs. I.S.T. °F	Mean wet bulb temperature 0830 hrs. I.S.T. °F	Vapour pressure millibars		Relative humidity %		Mean cloud amount, 0830 hrs. I.S.T.	Rainfall, inches				Number of rainy days (0.10" or more)		Wind	
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 0830 hrs. I.S.T.	Departure from normal	Mean 0830 hrs. I.S.T.	Departure from normal		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Resultant direction 0830 hrs. I.S.T.	Velocity in
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Assam																							
Lumding ...	76·8	+3·3	83	24	45·7	−1·5	41	13,17	63·5	58·2	14·0	+0·6	69	−21	...	0·02	−0·54	0·02	28	0	−1·4	...	..
Jammu and Kashmir																						...	
Jammu ...	66·2	+1·1	74	16	46·0	−1·8	39	3	51·1	47·7	10·1	+1·4	77	+9	5·0	9·28	+6·99	2·60	20	12	+8·6	...	..
Kargil (R) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
Mysore																							
Balehonnur ...	81·9	+1·0	85	4days	58·4	0	54	4days	65·7	60·6	15·8	+0·6	75	+2	...	0·02	−0·03	0·02	22	0	−0·2	...	...
Sikkim ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lachen ...	..	...	...	...	39·0	...	31	16	40·7	...	...	...	...	...	...	0·28	...	0·09	15	0	...	...	...
Tibet																							
Yatung (Chumbi)	50·1	+4·9	61	25	18·1	−1·5	12	16	25·9	24·5	3·9	−0·1	85	+4	1·6	1·02	+0·46	0·45	27	4	+2·3	...	...

(R) Register not received

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 5TH CLASS STATIONS— JANUARY 1950

Division	Station	Rainfall, inches				Number of rainy days (0.10" or more)		Division	Station	Rainfall, inches				Number of rainy days (0.10" or more)	
		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal			Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Assam ...	Mawsynram ...	0·08	...	0·08	17	0	...	Jammu & Kashmir	Sonamarg ...	13·82	+3·52	3·50	20	10	−1·9
West Bengal ...	Bankura ...	0	−0·58	0	...	0	−1·2		Gurez * ...	...	...	...	...	...	...
Bihar ...	Muzaffarpur ...	0·15	−0·37	0·15	26	1	−0·1	Deccan (Desh) ...	Khandala ...	0	−0·10	0	...	0	−0·1
	Chapra ...	0·42	−0·15	0·22	26	2	+0·7	Tamilnad ...	Palayamcottai ...	0	−1·71	0	...	0	−2·7
	Arrah ..	0·17	−0·50	0·10	26	1	−0·3	Sikkim ...	Thangu ...	0·15	...	0·07	26	0	...
Punjab (I) ...	Dalhousie ...	15·82	+8·70	5·30	20	13	+5·6		Lachung ..	2·46	+1·66	0·61	15	7	+4·1
	Kyelang ...	0	−2·51	0	...	0	−5·7		Chungthang ...	0·76	...	0·35	12	3	...
	Gondla ...	15·24	...	4·92	19	11	...								
	Kokaar ...	15·43	...	3·90	20	14	...								
	Kothi ..	4·35	...	0·53	29	10	...								
	Dharampore ...	5·25	+2·48	2·50	20	8	+4·0								
	Kharsali ...	...	...	...	...	...	...								
	Rana ...	6·10	...	1·80	26	9	...								
	Jamuna Chetty ...	5·05	...	1·72	26	8	...								

(*) Data not reliable.

MONTHLY MEANS OF UPPER WINDS.

During the month observations of velocity and direction of upper winds were made at 47 stations in India and eighbourhood, by means of pilot balloons. Particulars of the stations, their co-ordinates, and the approximate times of ıe regular pilot balloon ascents at each station are given in the table below. Data from ascents made at the scheduled time r within two hours on either side of the scheduled times of regular observations have been used for averaging. Night and ɔrning ascents were restricted to 10 kms. while the afternoon ascents were unrestricted. Data upto 9 km. are given ıder table A and data above 9 km. under table B.

For ascents during the afternoon only, heights were determined by the tail method as described in pages 146–151 Vol. XXIV, Part 5 of the Memoirs of the India Meteorological Department. For other ascents heights were calculated om the formula.

$$A = K \frac{L^{\frac{1}{2}}}{(L + W)^{\frac{1}{3}}}$$ where

A = Rate of ascent of balloon in metres per minute,

L = Effective free lift of the balloon, in grams,

W = Weight of balloon and attachments in grams,

K = a constant which has been taken to be 84.,

r ascents during night. For ascents in the morning the value of K used was different for different regions in India and fferent seasons.

In tables A & B

n represents the number of observations,

V represents the mean speed in m/sec. irrespective of direction,

v represents the resultant mean velocity of wind in m/sec.

ıd D represents the direction of resultant mean wind in degrees east of north.

Monthly means of previous years have appeared in the following publications :—

(1) Up to the end of 1919, in Vol. XXIII (Part III) of the MEMOIRS of this Department.

(2) 1920, in the MONTHLY WEATHER REVIEWS OF that year.

(3) 1921–27, in the INDIA WEATHER REVIEWS of those years.

(4) 1928–35, in the UPPER AIR DATA (Part 13) of the respective years.

(5) 1936–46, in the UPPER AIR DATA (Part A) of those years.

6) 1947, onwards in the respective Monthly Weather Report of every month.

Particulars of Pilot Balloon Stations in India

STATION	Lat. N.	Long E.	Ht. of Anemometer head m.s.l. in meters	Date of opening	Approximate times of flight (I. S. T.)	Remarks
Madhosagar	26° 13'	78° 00'	232	7th May 1938	0730 1430	
Madras	13° 04'	80° 15'	13	8th April 1926	0230 0730 1430	
Malegaon	20° 33'	74° 32'	443	8th May 1943	0230 0730 1430	
Mangalore	12° 52'	74° 51'	40	4th June 1928	0230 0730 1430	
Masulipatam	16° 11'	81° 08"	10	8th April 1942	0230 0730 1430	
Minicoy	8° 18'	73° 00'	16	14th April 1941	0230 0730 1430	
Nagercoil	8° 10'	77° 27"	69	18th October 1945	0230 0730 1430	
Nagpur	21° 09'	79° 07'	309	23rd April 1943	0230 0730 1430	Also worked between 20th August 1915 and November 1915.
New Delhi	28° 35'	77° 07'	227	20th October 1946	0230 0730 1430	Also worked between 16th November 1929 and January 1932.
Poona	18° 32'	73° 51'	560	5th January 1925	0230 0730 1430	
Port Blair	11° 40'	92° 43'	87	29th October 1945	0230 0730 1430	
Raipur	21° 50'	81° 41'	305	15th July 1944	0230 0730 1430	
Saharsa	25° 52'	86° 37'	52	1st April 1943	0730 1430	
Tezpur	26° 37'	92° 47'	80	12th August 1932	0230 0730 1430	
Tiruchirapalli	10° 49'	78° 42'	88	22nd June 1936	0230 0730 1430	
Trivandrum	8° 29'	76° 57'	73	8th December 1928	0730	
Udaipur	24° 35'	73° 42'	587	1st July 1947	0230 0730 1430	Shifted from Rajsamand.
Vengurla	15° 52'	73° 38'	91	22nd November 1941	0230 0730 1430	
Veraval	20° 55'	70° 22'	17	13th October 1941	0230 0730 1430	
Visakhapatnam	17° 42'	83 18'	57	24th September 1928	0230 0730 1430	
Ahmedabad	23° 02'	72° 35'	55	19th May 1928	0230 0730 1430	
Allahabad (Bamrauli)	25° 26'	44° 103'	103	28th February 1930	0230 0730 1430	
Ambala	30° 23'	76° 46'	283	1st April 1941	0230 0730 1430	
Anantapur	14° 41'	77° 37'	364	12th February 1946	0730 1430	
Asansol	23° 41'	86° 59'	135	29th May 1942	0230 0730 1430	
Bangalore	12° 58'	77° 35'	936	19th May 1925	0230 0730 1430	
Bareilly	28° 22'	79 24'	184	12th January 1943	0730 1430	
Bhopal	23° 16'	77 75'	530	26th February 1943	0230 0730 1430	
Bhuj	23° 15'	69° 48'	111	14th September 1937	0230 0730 1430	
Bikaner	28° 00'	73° 18'	229	18th October 1946	0730 1430	Shifted from Suratgarh.
Bombay	19° 0[illegible]'	72 50'	5	14th May 1933	0230 0730 1430	Also worked between 27th June 1919 & 31st March and also between 25th April 1923 and 2nd January.
Calcutta	22° 32'	88° 20'	21	14th May 1921	0230 0730 1430	Also worked between 30th March 1919 and Augut 1920.
Cochin	9° 58'	76° 14'	3	16th March 1942	0230 0730 1430	
Cooch Behar	26° 20'	89° 27'	53	6th July 1942	0730 1430	
Cuttack	20° 25'	85° 52'	31	5th December 1942	0230 0730 1430	
Deolali	19° 53'	73° 49'	576	January 1946	0730	Means are published from March 1947.
Dibrugarh	27° 28'	94 55'	110	1st June 1948	0730 1430	
Gadag	15° 25'	75° 38'	650	3rd May 1943	0230 0730 1430	
Gaya	24° 49'	85° 01'	117	19th March 1937	0230 0730 1430	
Gopalpur	19° 16'	84 53'	79	15th February 1946	0730 1430	
Gorakhpur	26° 45'	83 24'	79	5th January 1943	0730 1430	
Hyderabad	17° 26	78 27'	555	1st September 1929	0230 0730 1430	
Jagdalpur	19° 05'	73 01'	553	25th March 1948	0230 0730 1430	
Jamshedpur	22° 49'	86 11'	144	23rd July 1942	0730 1430	
Jharsuguda	21° 15'	89° 05'	232	1st May 1944	0230 0730 1430	
Jodhpur	26° 18'	73 01'	233	15th October 1934	0230 0730 1430	
Jabalpur	23° 10'	79° 57'	402	30th July 1928	0230 0730 1430	

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JANUARY 1950

STATION	AHMEDABAD												ALLAHABAD											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·1	0·5	326	31	1·5	0·9	22	31	2·2	0·4	324	31	1·3	0·3	115	31	1·2	0·3	242	31	2·6	1·3	293
0·15 a.g. ...	31	6·7	3·0	357	31	8·6	4·6	24	30	3·3	1·5	293	30	5·3	1·8	335	29	5·7	0·3	352	30	4·1	2·0	307
0·6 a.s.l. ...	31	5·2	2·2	339	31	7·4	1·8	28	30	3·2	1·1	262	30	5·3	3·7	310	29	5·6	1·8	305	29	4·7	2·4	298
1·0 ,, ...	31	4·2	0·9	240	31	5·5	0·9	260	31	3·6	1·6	249	30	6·7	5·7	293	28	5·9	4·4	292	29	6·5	4·8	293
1·5 ,, ...	31	5·1	3·1	198	31	6·1	4·1	233	31	4·9	3·5	235	30	9·5	8·7	285	28	8·8	7·9	292	30	8·3	7·0	285
2·0 ,, ...	29	7·4	5·6	212	31	8·7	6·9	228	30	7·7	6·1	241	29	9·9	9·2	283	27	10·3	9·4	285	30	9·2	8·7	284
2·5 ,, ...	29	7·9	6·2	228	29	9·8	7·6	228	29	9·8	8·4	245	26	10·5	9·7	286	27	11·2	10·3	285	30	10·7	9·8	283
3·0 ,, ...	29	9·4	7·9	261	29	10·1	7·9	247	28	10·5	9·5	247	25	11·4	10·8	283	25	11·5	11·1	285	29	12·5	11·6	286
4·0 ,, ...	14	11·9	11·1	259	27	12·1	11·0	257	26	13·0	11·4	257	7	14·1	13·6	268	22	15·2	14·6	278	27	16·8	15·5	280
5·0 ,, ...	2	14·7	14·5	250	19	14·5	13·3	273	23	15·7	14·6	266	1	8·5	8·5	315	11	15·4	14·4	275	26	21·4	20·1	279
6·0 ,, ...	1	18·0	18·0	260	13	17·8	17·0	276	23	19·7	18·7	271					8	17·6	17·3	271	22	26·6	25·5	276
7·5 ,, ...					8	21·1	19·7	279	13	25·0	23·6	279					4	18·1	17·5	281	9	28·0	26·2	275
9·0 ,, ...					2	21·2	21·2	287	7	25·6	25·0	280					1	24·5	24·5	265	4	27·4	26·1	267

STATION	AMBALA												ANANTAPUR								ASANSOL			
Time in I.S.T.	0230				0730				1430				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·2	0·4	38	31	1·8	0·4	73	31	2·6	0·7	132	31	1·2	0·8	122	31	3·3	3·1	69	31	1·5	1·1	317
0·15 a.g. ...	31	6·9	2·0	02	31	7·1	1·7	20	31	5·3	0·6	123	31	3·6	2·7	120	31	4·9	4·6	76	31	5·0	2·8	355
0·6 a.s.l. ...	31	6·8	0·9	7	31	7·9	1·2	7	31	5·4	0·8	120	31	5·1	4·1	120	31	4·4	4·1	82	31	5·2	3·7	322
1·0 ,, ...	30	5·5	0·5	234	29	6·4	0·2	9	30	6·1	0·9	123	31	6·6	5·9	100	31	4·6	4·3	81	31	6·7	6·0	295
1·5 ,, ...	31	5·7	1·5	225	29	6·3	1·0	210	28	6·9	2·3	148	31	5·2	4·4	76	31	5·0	4·5	81	29	8·8	8·2	291
2·0 ,, ...	28	5·7	2·1	217	27	6·2	1·7	226	28	6·1	2·5	186	30	5·2	3·5	58	30	5·2	4·3	80	23	10·4	10·0	298
2·5 ,, ...	28	6·3	3·5	234	26	5·1	2·5	217	27	6·3	3·4	222	29	5·4	3·5	67	30	5·3	3·7	84	11	11·9	11·4	298
3·0 ,, ...	26	6·8	5·1	242	23	4·9	3·0	240	26	6·4	4·2	239	30	5·3	2·9	69	30	5·7	3·3	75	7	13·4	13·4	290
4·0 ,, ...	6	8·2	7·1	258	21	8·5	6·5	259	23	9·2	7·7	261	30	5·1	2·0	50	30	5·8	1·9	31	1	11·5	11·5	270
5·0 ,, ...	3	9·7	9·6	262	17	14·0	12·7	267	21	13·6	11·9	267	30	5·8	2·0	347	30	6·5	1·6	04				
6·0 ,, ...	1	13·0	13·0	275	11	15·3	14·1	261	19	18·8	17·5	272	30	7·5	3·6	297	30	7·2	3·5	303				
7·5 ,, ...					4	20·9	17·7	278	14	27·3	25·0	276	26	10·9	7·7	303	30	9·9	1·1	287				
9·0 ,, ...					3	35·7	29·8	272	7	30·8	36·3	277	20	13·7	10·6	285	24	13·8	10·7	276				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JANUARY 1950

STATION	ASANSOL								BANGALORE								BAREILLY		
Time in I.S.T.	0730				1430				0230				0730				1430				0730		
Heights in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	1·4	1·2	317	31	2·3	1·9	306	31	3·3	3·1	88	31	3·1	2·9	91	31	3·3	3·0	89	31	1·6	2·0
0·15 a.g. ...	31	4·0	2·9	340	31	4·2	3·5	305	31	8·2	7·7	95	30	7·0	6·4	93	31	4·8	4·5	91	30	6·6	2·1
0·6 a.s.l. ...	31	4·6	3·4	327	31	4·1	3·6	310													30	6·7	1·7
1·0 ,, ...	31	6·0	5·1	304	31	4·8	4·3	312	31	6·6	6·1	95	30	5·5	5·0	96	31	4·5	4·2	88	28	6·0	3·2
1·5 ,, ...	31	8·5	7·8	299	31	7·1	6·6	304	29	5·3	4·3	68	30	6·3	5·5	73	31	4·5	4·3	79	28	6·9	3·8
2·0 ,, ...	31	11·1	10·3	300	31	10·8	10·3	301	29	4·7	3·1	67	30	6·0	5·2	65	30	4·8	4·3	80	28	7·7	6·3
2·5 ,, ...	29	11·4	10·7	304	31	12·7	12·1	299	26	6·1	4·8	69	30	6·1	4·5	75	28	5·5	4·1	69	27	8·8	7·7
3·0 ,, ...	27	12·6	11·6	293	31	14·7	13·9	297	23	6·1	4·8	66	29	6·3	4·5	78	28	5·9	3·9	71	27	9·9	8·2
4·0 ,, ...	12	12·6	12·1	277	21	15·1	14·4	286					28	5·9	3·3	75	28	5·7	2·7	45	20	12·6	11·1
5·0 ,, ...	4	13·1	12·7	270	10	15·2	14·5	277					27	5·2	2·6	26	28	5·8	2·0	17	10	16·3	15·8
6·0 ,, ...	3	17·0	16·1	270	6	18·0	17·6	261					27	6·1	2·0	349	25	6·2	2·4	330	4	18·5	18·1
7·5 ,, ...					3	19·5	18·2	270					22	8·8	4·9	322	20	8·7	4·0	269	1	17·0	17·0
9·0 ,, ...					5	30·5	30·5	265					12	10·4	6·6	279	15	11·7	7·9	263	1	18·5	18·5

STATION	BAREILLY				BHOPAL												BHUJ						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Heights in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	2·1	0·5	283	31	2·6	0·3	84	31	2·2	0·7	107	31	2·9	1·6	239	31	0·9	0·4	261	31	0·4	0·3
0·15 a.g. ...	30	3·9	1·8	290	31	7·6	1·0	90	31	6·7	1·1	86	31	3·9	2·1	251	31	7·5	4·1	323	31	5·3	2·6
0·6 a.s.l. ...	29	3·8	1·5	309	31	7·2	1·0	76	31	5·6	0·8	108	31	3·9	2·0	246	31	7·2	3·2	326	31	7·2	2·9
1·0 ,, ...	29	4·6	2·9	308	31	7·0	1·5	301	31	6·2	1·5	226	31	3·7	2·1	239	31	5·2	1·9	253	31	5·6	2·2
1·5 ,, ...	29	6·2	4·3	302	31	6·5	4·5	240	30	6·8	4·6	242	31	5·1	4·2	243	30	6·0	3·4	231	30	5·1	2·4
2·0 ,, ...	29	6·9	5·9	292	31	8·2	7·0	247	30	7·7	6·5	246	30	7·6	6·5	254	28	7·1	5·5	261	29	5·3	3·3
2·5 ,, ...	28	8·0	6·8	287	30	9·1	7·7	252	27	9·2	7·7	256	29	9·7	8·2	259	25	7·9	6·7	256	28	6·3	4·3
3·0 ,, ...	27	9·7	8·3	278	16	9·0	7·9	262	25	9·5	8·4	268	27	10·7	9·5	261	23	8·2	7·5	256	28	8·0	6·9
4·0 ,, ...	25	12·8	11·4	279	5	9·0	8·6	265	17	11·2	10·1	270	24	13·7	12·6	270	9	11·7	11·2	262	22	11·5	10·1
5·0 ,, ...	18	16·8	15·4	279	3	12·8	12·8	267	11	15·0	13·5	284	22	17·7	16·6	274	1	14·5	14·5	245	17	16·2	15·3
6·0 ,, ...	14	23·4	23·0	281					6	18·0	16·6	292	19	20·9	20·0	272	1	21·0	21·0	250	12	19·8	18·8
7·5 ,, ...	6	27·5	25·6	279					3	16·5	15·7	292	11	26·3	25·1	280					6	24·9	24·3
9·0 ,, ...	1	23·0	23·0	285					2	26·3	24·4	296	5	28·2	28·1	293					3	28·5	26·8

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JANUARY 1950

STATION	BHUJ				BIKANER								BOMBAY											
Time in I.S.T.	1430				0730				1430				0230				0730				1430			
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·5	1·1	314	31	1·8	0·9	127	31	2·0	0·9	244	31	0·6	0·3	46	31	1·0	0·9	084	31	5·7	4·8	307
0·15 a. g. ...	31	4·1	2·0	311	31	5·1	1·7	107	30	3·5	1·6	264	31	4·5	3·5	009	30	4·3	3·1	029	31	4·5	3·8	312
0·6 a.s.l. ...	31	4·5	2·3	301	30	5·7	0·9	346	30	3·7	1·4	264	31	4·4	2·8	360	31	4·9	2·4	038	31	3·0	0·7	334
1·0 ,, ...	31	4·8	2·6	281	30	5·6	2·3	291	31	4·3	2·0	246	31	4·8	1·1	235	31	4·2	0·2	303	31	3·9	1·1	210
1·5 ,, ...	31	5·0	3·1	252	30	5·8	3·7	259	31	5·3	4·0	242	30	6·1	3·7	190	31	5·6	3·9	199	31	5·9	3·7	204
2·0 ,, ...	29	5·9	4·1	251	29	7·0	5·8	248	29	7·4	6·5	246	29	7·2	5·0	188	30	6·5	4·8	201	31	6·7	4·8	213
2·5 ,, ...	28	6·7	5·4	255	28	7·9	6·9	253	28	9·9	9·1	251	28	7·1	4·6	208	28	7·3	4·8	234	31	7·2	5·2	230
			6·4	254	26	9·2																		
3·0 ,, ...	26	7·7					8·4	260	24	9·9	9·1	255	26	7·3	5·5	230	27	8·0	5·7	252	31	7·4	5·6	246
4·0 ,, ...	25	11·7	10·6	263	21	13·3	12·4	261	24	13·1	12·2	260	11	6·4	3·7	250	27	10·0	8·1	261	31	9·8	8·0	262
5·0 ,, ...	20	15·3	14·5	267	12	14·2	12·4	274	20	15·3	14·4	265	3	7·0	6·7	270	23	12·3	10·1	263	29	10·6	8·9	267
6·0 ,, ...	14	19·4	18·3	267	8	17·9	16·7	272	15	20·0	18·7	267	2	12·7	11·9	246	17	13·9	12·2	265	28	13·3	10·2	270
7·5 ,, ...	8	24·6	23·4	261	2	17·0	16·7	298	1	18·0	18·0	269					7	17·1	15·1	272	23	17·8	15·4	275
9·0 ,, ...	3	31·5	30·6	269													1	22·0	22·0	245	13	24·3	21·8	283

STATION	CALCUTTA												COCHIN (Willingdon Island)											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·5	0·9	331	31	1·5	0·9	351	31	2·5	1·7	316	31	1·2	0·9	057	31	1·8	1·7	080	31	3·4	3·2	264
0·15 a. g. ...	31	5·7	3·0	335	30	5·0	2·6	10	31	3·9	2·7	309	31	3·3	2·0	023	31	3·8	3·4	086	31	3·6	3·2	264
0·6 a.s.l. ...	30	5·7	2·9	326	30	4·5	2·7	323	31	4·1	3·2	307	31	2·7	1·2	040	31	2·9	1·6	045	31	2·1	0·9	009
1·0 ,, ...	30	5·9	4·1	307	30	5·3	4·1	312	31	5·1	4·4	306	31	2·7	1·8	080	31	2·4	1·3	057	31	3·3	2·9	060
1·5 ,, ...	30	6·5	6·0	307	30	7·4	6·8	31	31	7·1	6·4	309	30	3·5	3·1	055	31	3·6	3·0	064	31	4·7	4·1	078
2·0 ,, ...	30	8·9	8·3	302	30	8·9	8·3	307	31	9·6	9·0	307	27	5·2	4·6	065	29	5·3	4·3	090	31	5·6	4·9	081
2·5 ,, ...	26	10·7	9·8	302	28	9·8	9·2	305	31	11·1	10·7	300	25	5·6	4·7	096	29	5·1	4·3	099	30	5·6	5·0	086
3·0 ,, ...	20	11·9	10·7	302	27	10·8	9·8	302	31	12·9	12·2	295	22	5·6	5·1	098	29	5·6	4·4	095	30	6·5	5·7	087
4·0 ,, ...					16	11·6	10·2	289	29	14·8	13·9	289	10	5·9	5·1	065	28	6·2	5·2	079	29	7·0	5·6	076
5·0 ,, ...					7	12·8	11·1	276	26	17·7	16·6	286					24	6·8	5·5	073	28	7·6	6·3	074
6·0 ,, ...					4	13·3	12·9	272	19	18·5	16·7	285					21	8·6	6·9	078	28	8·4	5·8	069
7·5 ,, ...									6	23·1	21·5	275					11	8·2	4·8	333	21	9·2	5·8	072
9·0 ,, ...									4	27·4	27·3	274					6	10·1	7·9	275	16	8·4	0·8	054

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JANUARY 1950

STATION	COOCH BEHAR								CUTTACK												DEOLALI			
Time in I.S.T.	0730				1430				0230				0730				1430				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·4	1·1	71	31	1·5	0·5	168	31	0·1	0·1	338	31	0·5	0·3	346	31	0·9	0·4	287	23	0·7	0·6	026
0·15 a.g. ...	31	5·3	4·5	82	31	2·5	0·7	162	31	4·5	2·3	273	31	3·9	1·8	322	31	2·9	1·1	315	23	3·4	0·8	128
0·6 a.s.l. ...	31	4·8	3·3	85	31	2·5	0·6	134	31	4·9	1·5	265	31	4·5	0·6	312	31	2·9	1·6	296	23	2·0	0·8	077
1·0 ,, ...	31	4·3	2·3	92	31	2·7	0·7	105	31	4·9	3·1	321	31	4·5	2·4	351	31	3·5	2·4	310	23	4·8	1·5	138
1·5 ,, ...	29	4·3	2·8	88	30	3·6	0·5	114	31	6·0	4·9	326	30	5·7	4·5	339	31	4·6	3·9	310	23	5·6	3·3	182
2·0 ,, ...	27	4·8	1·9	83	28	4·3	0·6	314	31	6·9	5·8	316	30	5·9	4·9	329	31	5·3	4·6	301	23	6·5	5·2	199
2·5 ,, ...	27	6·2	2·3	309	27	6·9	4·6	292	18	5·8	4·9	304	30	6·7	5·2	313	31	6·6	5·6	295	23	7·0	5·3	218
3·0 ,, ...	27	10·4	9·2	281	21	10·4	9·1	288	17	7·4	6·5	292	30	8·3	6·8	301	31	9·3	7·9	295	23	8·3	6·2	243
4·0 ,, ...	22	16·3	15·7	284	21	15·7	15·2	276	10	15·3	13·1	299	29	11·8	10·5	286	30	13·2	11·5	293	23	10·0	8·5	259
5·0 ,, ...	14	17·4	16·1	280	15	16·5	16·1	273					22	13·4	11·9	282	28	15·1	13·8	283	21	12·0	10·2	265
6·0 ,, ...	8	17·3	16·2	273	11	18·5	18·0	278					15	17·8	16·8	282	27	17·4	16·0	288	19	14·3	12·5	271
7·5 ,, ...	1	11·0	11·0	325	4	19·9	18·5	315					3	23·0	22·6	293	21	23·4	20·9	281	14	20·8	18·6	269
9·0 ,, ...	1	24·5	24·5	310	1	22·5	22·5	305									13	31·0	28·8	276	8	26·1	23·3	274

STATION	DIBRUGARH								GADAG												GAYA			
Time in I S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·9	1·7	70	31	1·6	1·1	24	31	3·0	1·7	134	31	2·0	1·4	122	31	3·1	1·7	74	31	1·8	0·6	158
0·15 a.g. ...	27	3·3	3·1	62	31	2·1	1·5	32	31	7·7	5·3	114	31	6·6	5·3	125	31	3·9	3·2	83	31	4·4	1·7	304
0·6 a.s.l. ...	26	3·1	2·9	52	31	2·5	2·1	64													30	5·6	3·8	313
1·0 ,, ...	26	3·2	3·0	47	29	2·3	1·8	64	31	7·7	6·1	116	31	7·0	5·9	115	31	3·9	2·9	87	30	7·5	6·8	293
1·5 ,, ...	26	2·8	2·0	76	29	2·0	0·8	123	30	5·7	5·1	108	31	5·3	4·3	104	31	3·6	3·1	95	30	10·3	9·4	289
2·0 ,, ...	24	2·8	1·3	115	29	3·0	2·1	186	31	3·5	2·2	85	31	4·4	3·2	91	21	3·5	2·6	103	28	10·9	10·4	289
2·5 ,, ...	24	3·1	1·1	150	29	3·9	2·7	196	31	4·0	1·8	63	31	5·5	2·9	94	31	4·3	2·3	108	13	10·5	9·7	287
3·0 ,, ...	20	3·8	0·7	167	28	5·6	2·9	220	30	5·5	1·6	80	31	5·7	2·1	94	31	5·0	2·2	110	8	13·5	11·9	287
4·0 ,, ...	13	7·7	6·0	248	22	9·0	6·1	260	24	5·8	0·5	348	31	5·0	0·2	36	31	5·4	0·7	51				
5·0 ,, ...	10	16·5	15·1	268	20	15·5	13·2	271	14	5·4	3·2	279	29	6·4	3·4	313	31	6·7	2·3	312				
6·0 ,, ...	1	21·0	21·0	255	12	16·4	14·0	283	6	8·6	5·8	268	28	7·7	5·2	300	31	8·2	4·4	287				
7·5 ,, ...					11	25·6	22·4	291					25	11·7	9·3	295	28	12·1	8·7	288				
9·0 ,, ...					3	31·5	30·1	309					18	15·3	12·8	285	27	16·1	12·2	285				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JANUARY 1950

'ATION	GAYA								GOPALPUR								GORAKHPUR							
ıe in I.S.T.	0730				1430				0730				1430				0730				1430			
ght in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ace ...	31	1·7	1·3	171	31	3·5	2·8	299	31	3·7	3·6	335	31	3·7	3·0	142	31	1·3	0·3	226	31	1·9	0·8	251
a.g. ...	31	3·6	2·2	217	31	4·1	3·4	300	31	4·4	2·2	322	31	5·3	3·9	142	30	5·0	0·5	297	31	2·8	1·2	252
a.s.l. ...	31	4·7	3·6	295	31	4·4	3·8	291	31	4·3	0·2	220	31	2·6	0·6	034	30	4·6	1·2	305	31	3·1	1·5	283
,, ...	31	6·8	5·9	296	31	5·6	5·2	284	31	3·9	1·7	020	31	3·1	2·5	339	30	4·9	1·9	313	31	4·6	3·0	295
,, ...	31	9·6	9·0	294	31	9·1	8·7	287	31	4·9	3·6	006	31	4·9	3·8	338	29	6·8	5·2	339	31	7·3	6·0	299
,, ...	31	11·4	10·8	295	30	12·2	11·8	291	31	5·3	3·2	355	31	5·4	4·2	327	29	8·9	8·3	333	30	9·6	9·1	293
,, ...	31	12·0	11·3	293	30	13·3	12·7	291	31	5·2	3·1	336	31	5·9	4·7	317	27	10·0	9·3	334	28	11·5	11·1	292
,, ...	25	13·0	12·2	294	30	14·2	13·2	289	31	7·0	5·0	313	31	6·7	5·2	303	25	10·5	10·0	289	26	13·5	13·1	291
,, ...	9	13·5	11·4	271	29	18·2	17·2	286	29	9·3	7·3	292	29	10·4	8·5	295	16	12·5	11·9	281	21	14·9	14·4	287
,, ...	4	14·9	14·5	268	17	21·5	20·1	280	22	11·2	9·4	292	26	12·2	11·3	294	8	13·8	13·3	270	12	17·8	17·3	273
,, ...					10	24·7	23·0	273	18	14·8	12·2	280	22	14·8	13·0	293	3	18·5	18·5	270	5	20·1	19·4	265
,, ...					1	18·5	18·5	260	5	15·8	12·1	263	7	21·8	19·7	283					2	23·0	20·9	258
,, ...									3	24·6	24·0	244												

'ATION	HYDERABAD								JAGDALPUR							
ıe in I.S.T.	0230				0730				1430				0230				0730				1430			
get in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ıce ...	31	0·9	0·7	126	31	0·3	0·1	104	31	2·2	2·0	95	31	0·3	0·1	107	31	0·4	0·3	123	31	1·3	0·8	345
a.g. ...	31	7·3	5·9	117	31	5·9	5·0	129	31	4·3	3·7	99	31	3·9	0·8	348	31	3·1	0·8	99	31	2·4	1·3	355
a.s.l. ...	31	4·3	3·2	112	31	2·8	2·1	115	31	3·8	3·3	101	31	2·8	0·5	344	31	2·0	0·5	119	31	2·0	1·1	349
,, ...	31	7·2	6·4	117	31	7·5	6·2	118	31	4·0	3·2	91	31	4·1	1·1	19	31	3·8	1·6	40	31	2·3	1·1	04
,, ...	31	5·1	2·5	95	31	5·2	2·8	70	31	3·8	2·8	80	31	3·9	2·3	343	31	4·5	3·2	08	31	2·7	1·7	354
,, ...	31	5·9	2·5	05	31	6·0	2·3	20	31	3·8	1·7	46	31	4·1	2·7	327	31	5·1	3·6	343	31	3·5	2·1	335
,, ...	31	5·6	2·1	355	31	5·7	2·2	355	31	4·4	1·3	05	30	5·5	4·0	315	31	5·6	3·6	327	31	4·7	2·3	309
,, ...	30	5·4	2·3	323	31	5·6	1·3	337	31	5·3	1·4	319	30	6·9	5·1	310	31	6·6	4·5	320	31	5·9	4·0	287
,, ...					31	7·3	3·7	301	30	6·9	3·2	288	14	9·1	7·0	290	27	8·5	6·3	293	30	10·1	7·7	289
,, ...					31	8·7	6·0	291	30	8·9	5·5	288	5	7·6	7·0	247	27	10·5	8·4	290	27	11·9	9·6	285
,, ...					30	12·2	9·6	287	30	12·3	9·4	285	2	10·3	10·2	288	31	14·3	12·3	289	26	14·6	12·9	287
,, ...					23	15·2	12·2	277	28	16·5	13·0	286	2	19·3	19·1	254	16	18·3	16·4	273	22	19·8	18·0	272
,, ...					2	22·7	20·2	259	24	21·1	17·0	280					9	21·7	18·7	266	14	23·3	23·1	260

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JANUARY 1950

STATION	JAMSHEDPUR								JHARSUGUDA											JODHPUR		
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	1·3	1·1	289	31	2·0	1·6	275	31	0·7	0·7	13	31	1·1	1·0	12	31	1·3	0·9	263	31	3·4	2·2
0·15 a. g. ...	31	2·3	1·3	297	31	2·8	2·2	279	31	3·9	2·1	15	31	4·2	3·1	43	31	2·9	1·9	268	31	7·3	1·8
0·6 a.s.l. ...	31	3·0	1·1	296	31	3·2	2·6	287	31	4·5	1·7	296	31	4·2	1·3	355	31	2·9	2·0	269	31	6·5	0·4
1·0 ,, ...	31	4·7	3·4	293	31	4·2	3·4	295	31	4·4	2·9	289	31	4·3	2·6	296	31	3·1	2·3	277	31	5·5	2·6
1·5 ,, ...	31	7·0	6·1	302	31	6·4	5·7	302	31	5·0	3·7	296	31	5·2	3·8	302	31	4·7	3·9	293	31	6·9	5·5
2·0 ,, ...	31	8·7	7·8	303	31	8·9	8·2	300	31	6·7	5·5	299	31	6·8	6·0	304	31	7·0	6·1	299	31	7·2	6·4
2·5 ,, ...	30	9·6	8·9	301	31	10·9	10·2	297	29	7·7	7·1	294	31	7·6	6·8	305	31	8·2	7·1	294	28	7·4	6·3
3·0 ,, ...	30	10·5	9·5	295	31	12·2	11·2	291	26	9·2	8·1	292	31	9·3	8·2	300	31	10·2	9·0	290	25	9·8	8·7
4·0 ,, ...	24	13·0	12·1	286	31	15·1	14·1	286	11	11·8	11·3	282	30	12·4	11·1	287	31	13·9	12·6	286	3	7·7	7·5
5·0 ,, ...	17	15·4	14·2	281	30	18·9	17·9	281					25	16·4	15·2	273	31	18·3	16·9	280	1	8·0	8·0
6·0 ,, ...	7	20·9	19·2	271	23	20·1	19·1	276					17	17·4	15·8	275	26	20·7	19·1	274			
7·5 ,, ...					3	18·2	16·1	287					7	20·0	19·5	274	10	23·0	22·2	264			
9·0 ,, ...													2	23·0	22·9	265	2	27·5	27·4	270			

STATION	JODHPUR								JABALPUR											MADHOSAGA		
Time in I.S.T.	0730				1430				0230				0730				1430				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	3·0	1·9	37	31	3·5	0·7	253	31	1·4	0·9	118	31	0·9	0·9	158	31	1·6	0·8	251	31	1·3	0·5
0·15 a. g. ...	31	6·2	2·7	64	31	4·1	1·3	259	31	4·5	1·3	154	31	4·5	2·0	147	31	3·3	1·3	276	31	4·8	0·1
0·6 a.s.l. ...	31	5·7	0·2	344	31	4·4	1·3	238	31	4·8	1·1	171	31	5·2	1·7	158	31	3·4	1·3	270	29	6·0	0·8
1·0 ,, ...	31	4·8	2·1	244	31	4·5	2·8	237	31	5·1	2·2	245	31	5·6	1·5	269	31	3·9	2·3	263	29	5·8	2·6
1·5 ,, ...	30	6·0	4·2	248	30	5·9	4·6	244	31	6·0	4·3	268	31	6·1	4·0	268	31	5·8	4·1	271	29	7·2	5·9
2·0 ,, ...	29	7·1	6·2	245	28	7·3	6·6	247	31	7·5	6·5	275	31	8·0	6·7	273	31	7·5	6·3	274	29	9·0	8·0
2·5 ,, ...	29	11·4	7·1	254	27	8·8	8·1	249	27	8·8	8·2	278	31	9·1	7·9	277	31	8·9	7·5	276	29	10·0	8·9
3·0 ,, ...	28	9·6	8·7	258	27	10·8	10·0	251	26	10·3	9·3	281	31	10·8	9·4	284	30	10·8	9·6	277	28	10·8	9·7
4·0 ,, ...	24	13·1	11·8	263	26	13·7	12·7	258	1	12·5	12·5	295	27	14·1	12·9	273	29	14·8	13·2	275	25	13·7	12·5
5·0 ,, ...	17	16·1	15·0	270	24	18·2	17·3	266	1	17·0	17·0	280	14	13·1	12·0	274	26	18·3	16·8	275	22	17·8	16·7
6·0 ,, ...	13	19·9	18·5	277	21	21·6	20·4	271					8	18·2	16·7	279	22	22·0	20·5	274	18	22·4	20·8
7·5 ,, ...	4	21·5	21·5	292	12	25·2	23·9	279					1	18·0	18·0	300	9	24·8	23·6	278	12	27·4	26·0
9·0 ,, ...	1	30·5	30·5	290	4	25·1	16·5	287									2	27·5	24·4	282	9	30·7	27·5

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JANUARY 1950

STATION	MADHOSAGAR				MADRAS												MALEGAON							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·1	1·0	319	31	2·0	1·5	330	31	2·1	1·6	317	31	5·0	4·3	64	31	2·7	1·9	277	31	2·0	1·4	279
0·15 a.g. ...	31	3·6	1·0	294	31	4·5	4·1	59	31	4·0	3·0	49	31	5·2	4·6	63	31	5·0	2·3	304	31	3·8	0·1	315
0·6 a.s.l. ...	31	2·7	0·9	269	31	5·7	5·5	62	31	5·5	4·9	71	31	4·5	4·0	43	31	5·0	2·2	304	31	3·8	0·1	315
1·0 ,, ...	30	3·8	2·3	272	31	6·0	5·2	50	31	6·1	5·6	69	29	4·9	4·2	46	31	5·9	1·4	86	31	5·3	2·2	126
1·5 ,, ...	30	6·4	5·2	266	28	5·2	4·5	53	31	6·3	5·5	57	28	5·5	4·7	56	31	6·5	2·4	158	31	6·2	3·8	180
2·0 ,, ...	29	8·7	7·7	260	27	5·2	4·0	70	30	6·5	5·8	62	28	5·9	5·3	64	31	7·2	4·5	198	31	8·2	6·0	203
2·5 ,, ...	29	10·8	10·1	262	27	5·4	4·6	74	27	6·2	5·2	65	28	6·0	4·7	63	29	8·5	6·3	203	31	8·1	5·8	227
3·0 ,, ...	29	12·1	11·2	265	25	5·9	4·6	75	27	6·1	4·4	66	29	5·8	4·6	65	27	7·9	6·1	211	30	8·7	6·5	252
4·0 ,, ...	29	16·5	15·6	266	17	4·9	3·5	50	27	5·3	3·7	64	27	5·9	3·6	56	23	10·4	8·3	250	29	11·6	9·8	268
5·0 ,, ...	25	20·0	19·3	272					24	6·7	3·7	54	28	6·2	2·1	48					27	13·7	12·0	273
6·0 ,, ...	23	23·2	21·8	278					24	6·6	2·0	54	27	7·0	1·4	318					26	16·0	14·0	272
7·5 ,, ...	11	24·0	22·0	287					18	8·7	3·6	324	24	9·1	4·4	308					20	20·7	17·9	275
9·0 ,, ...	7	27·9	25·7	277					11	9·9	4·9	292	20	10·4	6·9	275					9	22·5	21·3	288

STATION	MALEGAON				MANGALORE												MASULIPATAM							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·9	0·5	197	31	2·6	2·3	75	31	3·3	3·1	90	31	4·1	3·1	277	31	1·2	0·5	25	31	1·4	1·1	6
0·15 a.g.. ...	31	3·2	1·1	171	31	4·5	3·5	26	31	5·8	5·0	72	31	4·5	3·8	276	31	4·3	2·9	125	31	4·2	2·6	64
0·6 a s l.. ...	31	3·2	1·1	171	31	4·9	3·1	8	31	5·7	3·3	59	31	2·4	0·4	68	31	4·7	4·1	102	31	4·7	3·9	110
1·0 ,, ...	31	3·1	1·3	197	31	5·0	2·9	58	31	4·7	3·0	80	31	3·4	3·0	85	31	5·0	4·0	72	31	5·2	4·4	92
1·5 ,, ...	31	4·1	2·8	211	29	5·9	4·9	88	31	4·9	4·2	98	31	5·6	5·3	83	29	5·4	4·2	61	31	5·4	4·1	62
2·0 ,, ...	31	5·9	4·5	219	28	6·6	5·3	90	31	5·6	4·8	94	30	7·1	6·7	90	29	5·5	3·4	46	31	5·3	2·7	68
2·5 ,, ...	31	7·2	5·5	237	22	6·3	4·5	90	31	6·0	4·8	96	31	7·0	5·7	95	26	5·2	2·8	34	31	4·9	2·8	43
3·0 ,, ...	30	8·3	6·4	250	20	5·9	4·1	90	31	6·3	4·7	94	31	6·7	5·2	88	24	5·4	2·5	357	30	5·1	2·8	26
4·0 ,, ...	28	12·1	10·7	259	7	7·1	4·8	114	29	5·5	2·7	76	31	6·0	3·2	69	13	5·9	2·0	328	28	5·7	2·4	353
5·0 ,, ...	27	13·9	12·0	269					29	5·8	0·7	22	31	6·2	2·2	51					26	7·4	4·1	328
6·0 ,, ...	27	17·4	15·7	273					28	5·9	0·6	29	31	5·8	0·9	79					24	9·9	6·9	302
7·5 ,, ...	19	19·9	18·2	282					26	9·3	4·1	302	29	8·0	3·0	294					13	14·2	12·7	286
9·0 ,, ...	15	23·1	21·8	278					19	11·4	7·8	271	14	12·0	7·9	274					6	16·5	12·3	291

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JANUARY 1950

STATION	MASULIPATAM				MINICOY												NAGERCOIL							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·3	1·9	112	31	2·0	1·7	25	31	1·8	1·6	31	31	2·6	2·3	27	31	3·8	3·6	46	31	3·5	3·2	50
0·15 a.g. ...	31	4·4	3·3	117	31	3·3	2·9	23	31	3·7	3·3	34	31	4·3	3·8	29	31	6·8	6·0	48	31	7·9	7·7	50
0·6 a.s.l. ...	31	4·4	2·9	82	31	4·1	3·4	43	31	4·1	3·5	43	30	4·2	3·9	46	31	6·4	6·1	39	31	7·3	7·1	40
1·0 ,, ...	31	4·6	2·9	64	29	5·3	4·5	67	30	5·2	4·6	68	29	4·9	4·3	63	31	7·0	6·5	33	31	8·3	7·7	35
1·5 ,, ...	31	5·3	3·9	48	27	6·6	5·7	80	29	6·7	5·6	86	29	4·9	3·9	73	31	7·8	7·1	50	31	7·8	7·0	50
2·0 ,, ...	31	5·3	3·6	41	26	6·3	5·5	86	28	6·1	5·3	89	27	5·0	3·1	93	29	6·8	5·6	78	31	7·3	6·1	68
2·5 ,, ...	31	4·8	2·7	40	25	5·4	4·4	92	23	5·3	4·5	103	27	5·4	3·7	89	23	5·5	4·5	83	30	6·2	4·9	72
3·0 ,, ...	31	4·9	1·9	29	21	4·8	3·7	99	22	5·2	4·2	106	27	5·9	4·1	86	23	5·2	4·1	89	30	5·8	5·1	79
4·0 ,, ...	31	5·7	2·4	333	9	4·8	2·6	112	20	7·1	5·2	84	24	6·9	5·1	81	6	8·1	4·1	102	28	6·9	5·2	76
5·0 ,, ...	31	5·8	3·6	301	2	6·0	4·0	174	17	8·7	5·5	91	23	7·5	5·2	79					28	8·0	6·0	82
6·0 ,, ...	28	9·6	6·7	292					12	1·7	8·2	99	19	8·9	7·5	85					26	10·8	7·4	81
7·5 ,, ...	19	13·3	10·8	272					9	10·8	7·8	32	17	9·7	6·0	62					24	10·9	6·4	73
9·0 ,, ...	11	15·4	12·7	264					8	9·4	4·0	16	16	9·6	1·7	360					19	11·0	4·2	50

STATION	NAGERCOIL				NAGPUR												NEW DELHI							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	4·9	3·7	48	31	1·3	0·7	8	31	0·9	0·6	35	31	1·5	0·6	183	31	1·9	0·4	331	31	1·9	0·3	274
0·15 a.g. ...	31	8·6	7·5	55	31	5·3	2·3	121	31	4·3	3·0	49	31	2·6	0·9	150	31	7·4	2·1	356	29	6·7	1·6	327
0·6 a.s.l. ...	31	7·4	6·9	50	31	5·6	3·1	141	31	5·1	2·1	133	31	2·8	1·2	174	30	6·9	1·6	323	29	7·0	1·7	317
1·0 ,, ...	31	7·0	6·4	38	31	4·6	2·0	166	31	5·5	2·4	169	31	3·8	1·1	207	30	6·2	1·7	237	29	6·6	2·0	273
1·5 ,, ...	30	7·7	6·9	30	31	4·0	1·1	239	31	4·9	1·0	188	31	3·8	1·6	252	29	6·2	4·0	272	28	5·8	4·1	271
2·0 ,, ...	30	8·3	7·3	47	31	4·8	3·0	282	31	5·5	2·6	288	31	4·9	3·5	282	23	6·8	5·3	263	26	7·1	6·2	274
2·5 ,, ...	30	7·8	6·4	62	31	6·3	5·3	272	30	7·0	5·5	291	31	7·1	5·8	281	19	7·5	6·3	253	26	7·7	6·7	265
3·0 ,, ...	30	6·4	5·3	72	25	7·3	5·9	275	30	8·0	6·6	287	30	8·7	7·4	283	12	8·1	7·1	256	24	8·1	7·1	261
4·0 ,, ...	31	7·7	6·3	76	8	5·4	4·7	294	27	11·2	9·4	291	30	12·1	10·6	275	3	10·0	9·9	249	18	10·6	9·3	275
5·0 ,, ...	30	8·3	6·7	78					22	13·1	10·9	285	29	15·1	13·7	275					17	15·8	14·4	274
6·0 ,, ...	29	9·8	7·6	71					15	15·1	13·3	283	25	17·1	15·7	274					13	20·6	18·8	279
7·5 ,, ...	26	10·6	6·7	67					7	18·4	17·4	266	20	23·0	20·9	276					10	27·2	25·3	275
9·0 ,, ...	20	10·9	3·7	79					3	21·5	20·5	271	6	25·2	24·3	271					6	34·3	31·8	27(

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JANUARY 1950

STATION	NEW DELHI				POONA												PORT BLAIR							
me in Km.	1430				0230				0730				1430				0230				0730			
ight in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
rface ...	31	3·2	0·9	299	31	1·7	1·3	244	31	1·6	0·9	250	31	3·3	0·2	34	31	3·4	3·0	40	31	3·0	2·8	39
15 a. g. ...	30	4·3	1·4	304	31	3·5	0·7	283	31	2·6	0·8	95	31	3·2	0·4	202	31	6·2	5·9	37	31	6·1	5·8	34
6 a.s.l. ...	30	4·1	1·5	297	31	2·6	1·6	216	31	1·9	0·8	203	31	3·0	0·5	211	29	6·6	6·2	46	29	7·8	7·3	47
0 ,, ...	29	4·8	2·2	279	31	4·9	0·5	309	30	5·1	1·9	118	31	3·5	1·2	189	25	5·5	4·3	69	28	7·0	5·9	72
5 ,, ...	29	5·7	3·8	268	30	5·7	3·3	137	30	5·5	3·0	150	31	3·9	2·3	199	20	5·6	3·2	77	27	7·8	5·7	87
0 ,, ...	28	6·6	5·3	269	31	5·6	4·2	148	30	5·6	3·8	178	31	4·8	3·0	216	13	6·7	3·2	64	23	6·6	3·6	84
5 ,, ...	28	8·0	6·6	267	31	5·8	3·3	191	31	5·7	3·4	221	31	5·5	3·6	236	6	5·6	4·2	41	23	6·4	3·0	89
0 ,, ...	26	8·7	7·6	270	31	6·2	4·1	228	31	7·0	4·9	244	31	6·7	4·5	249	6	5·3	4·5	38	21	5·4	1·3	101
0 ,, ...	24	12·6	11·6	271	25	8·5	6·8	261	31	8·6	6·5	266	31	8·6	6·4	264					18	5·2	3·5	47
0 ,, ...	23	18·0	17·4	274	4	10·5	10·0	256	30	10·4	7·9	269	31	10·1	8·4	262					17	6·4	3·8	25
0 ,, ...	19	19·6	18·5	274	1	19·0	19·0	250	28	13·2	11·4	279	31	12·9	11·2	274					12	8·1	4·1	5
5 ,, ...	12	25·8	23·7	276					24	17·0	15·2	271	25	17·1	15·6	274					7	10·4	5·8	304
0 ,, ...	7	23·7	21·1	280					12	20·1	18·6	284	22	21·6	20·0	277					5	14·6	12·4	304

STATION	PORT BLAIR				RAIPUR												SAHARSA							
ime in I.S.T.	1430				0230				0730				1430				0730				1430			
eight in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
rface ...	31	3·8	3·7	48	31	2·0	0·3	300	31	1·2	0·2	127	31	1·8	1·1	290	31	0·7	0·2	332	31	2·0	1·2	253
15 a. g. ...	31	7·0	6·8	47	31	4·9	0·2	77	31	3·7	0·5	136	31	3·2	1·5	279	31	5·4	1·5	313	31	3·3	2·1	267
6 a.s.l. ...	31	6·6	6·0	46	31	4·5	0·4	145	31	5·1	0·5	141	31	2·9	1·3	272	31	4·1	1·4	308	31	3·3	2·7	271
0 ,, ...	26	5·7	3·8	57	31	3·5	0·3	269	31	5·2	1·2	271	31	3·1	1·3	293	30	4·8	2·1	298	30	4·1	3·0	275
5 ,, ...	25	6·1	3·1	63	30	4·7	2·8	304	31	5·3	2·9	311	31	4·1	2·3	306	30	8·7	4·1	302	30	6·8	5·1	294
0 ,, ...	25	5·9	2·8	76	31	6·1	4·6	303	31	6·2	5·0	308	31	5·4	3·5	312	30	8·7	6·6	298	30	9·6	7·8	295
5 ,, ...	25	5·0	2·0	93	30	7·0	5·9	296	31	7·6	6·2	307	31	6·9	5·4	302	29	11·5	10·3	291	29	11·9	11·3	290
0 ,, ...	22	5·0	2·0	84	22	8·7	7·8	286	31	9·2	7·3	300	31	8·6	7·3	293	27	13·2	12·8	291	29	13·4	13·0	289
0 ,, ...	22	4·6	1·8	43	6	10·5	8·7	288	30	12·1	10·2	287	30	12·9	11·0	282	19	14·1	13·6	285	24	17·8	17·2	286
0 ,, ...	19	6·0	2·3	10	2	9·7	8·4	288	27	16·7	14·4	283	27	16·7	14·9	277	8	15·8	14·7	286	17	20·0	19·2	280
0 ,, ...	17	9·1	1·6	13					21	18·4	16·2	284	19	17·7	15·7	281	5	19·4	18·0	281	10	22·6	21·5	272
5 ,, ...	15	9·9	5·1	337					11	21·9	18·9	276	12	22·5	20·5	273					5	27·7	25·9	275
0 ,, ...	12	11·4	9·2	281					4	28·0	27·0	271	9	29·3	27·5	267					1	16·5	16·5	330

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JANUARY 1950

STATION	TEZPUR												TIRUCHIRAPALLI										
Time in I.S.T.	0230				0730				1430				0230				0730				1430		
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	1·5	1·4	48	31	1·3	1·1	52	31	1·1	0·8	69	31	2·2	2·1	36	31	1·9	1·7	22	31	2·9	2·7
0·15 a.g. ...	27	5·3	5·0	62	31	4·4	4·3	72	31	3·4	2·7	77	31	7·4	7·1	48	31	5·8	5·6	29	30	4·9	4·7
0·6 a.s.l. ...	27	5·2	4·6	91	30	5·4	5·0	84	31	3·4	3·0	81	31	9·5	9·2	56	31	8·0	7·7	50	30	5·7	5·5
1·0 ,, ..	26	3·7	3·7	97	30	5·0	4·2	87	31	3·1	2·2	101	31	8·9	8·6	52	31	7·7	7·4	56	31	6·1	5·8
1·5 ,, ...	23	3·2	1·4	82	29	4·6	3·1	87	29	3·5	1·7	147	29	6·7	5·5	39	31	6·9	6·0	60	30	7·0	6·5
2·0 ,, ...	22	4·6	0·7	76	28	4·7	1·9	81	28	4·2	1·6	183	28	6·9	5·5	63	30	7·2	6·4	68	29	7·4	6·8
2·5 ,, ...	20	5·2	0·3	204	27	4·3	1·6	96	27	4·2	1·2	224	28	6·5	5·6	70	30	7·1	6·6	75	29	7·6	6·9
3·0 ,, ...	17	5·6	3·1	241	24	4·3	0·8	239	26	6·3	4·1	262	28	6·9	6·0	78	30	7·0	6·3	81	29	7·3	6·6
4·0 ,, ...	10	10·3	9·7	272	18	12·3	10·8	270	22	14·1	13·3	269	3	5·3	4·3	92	28	6·5	4·5	72	28	6·7	5·2
5·0 ,, ...					17	17·2	15·6	271	21	18·4	18·1	270					27	6·3	3·9	72	28	6·7	4·7
6·0 ,, ...					12	20·8	17·6	277	19	21·4	20·4	269					27	7·3	3·5	80	28	8·2	3·8
7·5 ,, ...					5	19·6	18·5	312	11	23·6	21·9	286					25	7·5	2·2	4	19	9·6	4·2
9·0 ,, ...					3	29·5	29·5	289	8	25·1	24·1	290					18	9·8	6·4	291	14	11·7	4·0

STATION	TRIVANDRUM				UDAIPUR												VENGURLA						
Time in I.S.T.	0730				0230				0730				1430				0230				0730		
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	1·0	0·8	34	31	0·2	0·2	269	31	0·3	0·3	288	31	2·2	0·6	210	31	1·4	1·1	18	31	1·1	1·0
0·15 a.g. ...	31	2·5	1·6	70	29	3·2	1·3	332	31	2·9	1·6	300	30	3·4	1·9	234	31	6·1	5·5	15	31	4·8	4·0
0·6 a.s.l. ...	31	2·1	0·4	110													31	6·9	4·5	8	31	6·0	3·4
1·0 ,, ...	31	2·9	1·7	66	30	4·7	1·0	264	31	4·3	0·7	252	30	3·5	2·0	230	31	5·1	1·5	70	31	5·0	2·3
1·5 ,, ...	31	3·8	2·1	62	31	5·7	4·0	225	31	6·2	3·9	234	31	4·5	3·7	237	31	4·6	3·7	115	31	4·8	3·9
2·0 ,, ..	31	4·0	2·5	88	29	7·2	6·5	227	30	7·8	7·0	238	31	7·1	6·4	246	31	5·1	4·4	111	31	4·6	3·4
2·5 ,, ...	31	4·2	3·1	90	28	8·4	7·5	241	29	9·0	7·5	245	31	8·2	7·9	248	30	4·9	2·0	115	31	4·9	1·5
3·0 ,, ...	30	4·9	4·1	91	25	9·1	7·6	250	28	9·7	7·9	249	30	10·9	9·5	250	30	5·2	0·6	148	31	6·1	0·6
4·0 ,, ...	28	6·9	5·0	83	5	11·3	10·5	289	24	11·0	9·9	264	28	14·7	12·2	258	24	5·5	2·1	274	31	5·9	1·1
5·0 ,, ...	27	8·3	5·7	80	1	7·0	7·0	305	17	15·0	14·0	274	21	17·8	16·7	269	9	7·1	5·1	259	30	6·5	3·2
6·0 ,, ...	23	8·3	4·9	79	1	13·5	13·5	300	8	17·4	16·6	275	13	20·0	19·1	279	7	8·8	6·4	260	30	8·9	6·1
7·5 ,, ...	18	8·1	3·8	21					1	17·5	17·5	305	9	24·7	23·4	287	4	10·4	8·7	305	19	13·5	9·3
9·0 ,, ...	12	6·5	3·3	280					1	22·0	22·0	295	1	26·0	26·0	255					13	15·3	12 8

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JANUARY 1950

STATION	VENGURLA				VERAVAL												VISAKHAPATNAM							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	4·4	3·4	266	31	2·8	3·6	14	31	2·7	2·5	20	31	5·0	3·7	270	31	0·7	0·3	296	31	0·3	0·2	20
0·15 a. g. ...	31	4·5	3·4	282	31	6·9	5·2	356	31	7·6	6·4	17	31	6·0	3·9	266	31	2·8	0·9	301	31	2·3	1·3	349
0·6 a.s.l. ...	31	2·7	0·5	56	31	5·5	3·3	336	31	5·6	3·0	346	31	4·6	2·3	296	31	3·4	0·7	126	31	3·3	1·0	80
1·0 ,, ...	31	3·6	2·1	105	31	4·6	0·7	272	31	4·8	2·1	301	30	4·7	2·3	336	31	3·4	1·5	42	31	3·5	2·3	57
1·5 ,, ...	31	4·5	3·2	99	31	4·8	2·1	206	29	5·3	2·1	245	30	5·3	1·9	322	31	4·0	2·2	38	31	4·5	3·2	38
2·0 ,, ...	31	4·3	2·7	98	29	5·9	3·8	238	29	5·9	2·9	234	31	5·3	2·4	252	31	4·2	3·0	16	31	4·6	2·7	21
2·5 ,, ...	31	4·8	1·6	81	25	7·1	5·6	255	28	6·1	3·7	248	30	6·3	4·8	246	26	5·3	3·1	335	31	4·8	2·7	350
3·0 ,, ...	31	5·1	1·0	139	23	8·7	7·4	252	28	7·5	5·9	257	30	8·0	6·7	247	21	6·2	4·5	328	30	5·6	3·6	331
4·0 ,, ...	31	5·4	0·6	250	11	7·7	6·2	268	23	10·2	8·7	260	29	11·6	10·3	252	8	8·7	6·4	318	28	6·3	4·7	305
5·0 ,, ...	31	6·9	3·6	289	1	6·0	6·0	300	20	13·1	11·4	267	28	14·2	13·7	266					24	9·9	7·4	300
6·0 ,, ...	30	8·5	5·2	274					12	16·9	15·5	272	22	17·5	16·3	273					17	15·3	12·9	297
7·5 ,, ...	28	13·5	11·2	282					6	16·9	16·3	288	18	20·4	19·6	275					5	17·1	14·6	277
9·0 ,, ...	26	18·2	15·9	279									11	22·8	21·4	280					2	19·5	16·0	266

STATION	VISAKHAPATNAM			
Time in I.S.T.	1430			
Height in Km.	n	V	v	D
Surface ...	31	4·1	3·0	114
0·15 a. g. ...	31	4·7	3·5	119
0·6 a.s.l. ...	31	2·8	1·4	38
1·0 ,, ...	31	3·0	2·2	13
1·5 ,, ...	31	4·4	3·2	6
2·0 ,, ...	31	4·5	2·9	355
2·5 ,, ...	31	4·6	2·6	334
3·0 ,, ...	31	4·9	3·1	313
4·0 ,, ...	31	7·5	5·6	307
5·0 ,, ...	29	8·8	7·2	291
6·0 ,, ...	28	12·2	9·8	287
7·5 ,, ...	20	17·1	15·3	276
9·0 ,, ...	10	19·4	17·9	279

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

JANUARY 1950

Height in Km	n	V	v	D
		AHMEDABAD		
10	7	35·3	34·6	294
11	2	45·0	44·8	276
12	1	51·5	51·5	275
		ALLAHABAD		
10	2	39·3	39·3	285
11	1	37·5	37·5	280
		AMBALA		
10	4	37·6	33·3	278
11	2	40·7	39·0	264
12	2	50·5	49·0	264
13	1	60·0	60·0	250
		ANANTAPUR		
10	37	16·0	12·8	271
11	27	18·3	14·8	267
12	18	16·2	13·7	270
13	12	14·4	12·6	252
14	7	10·6	9·8	240
15	4	12·1	11·4	246
16	3	13·3	10·7	253
17	1	9·5	9·5	165
18	1	8·5	8·5	150
19	1	10·0	10·0	160
20	1	11·5	11·5	175
21	1	17·5	17·5	165
22	1	15·0	15·0	180
23	1	13·0	13·0	195
24	1	10·0	10·0	220
25	1	12·5	12·5	240
26	1	20·0	20·0	245
27	1	20·0	20·0	250
28	1	24·0	24·0	270
29	1	29·0	29·0	260
30	1	43·0	43·0	270
31	1	57·5	57·5	250
32	1	70·5	70·5	245
		BANGALORE		
10	25	11·9	7·0	261
11	8	6·6	5·3	262
12	8	7·7	6·2	236
13	4	10·9	8·5	286
14	1	10·0	10·0	295
15	1	17·0	17·0	310
		BAREILLY		
10	2	24·3	24·3	290
11	1	24·5	24·5	265
12	1	30·0	30·0	260
		BHOPAL		
10	2	38·7	37·7	230
		BHUJ		
10	1	30·0	30·0	260
		BOMBAY		
10	11	26·3	24·2	291
11	8	29·2	27·1	296
12	5	29·3	25·8	298
13	2	30·3	26·9	301
14	1	10·5	10·5	295
15	1	10·5	10·5	280
16	1	11·5	11·5	275
17	1	9·0	9·0	280
		CALCUTTA		
10	1	24·0	24·0	265
		COCHIN (Willingdon Island)		
10	17	9·2	3·0	241
11	10	8·8	5·7	191
12	9	10·9	9·2	213
13	7	10·0	9·0	230
14	7	10·9	7·9	225
15	7	10·9	3·6	275
16	4	13·3	2·7	47
17	4	13·5	3·0	100
18	2	18·3	12·1	257
19	2	12·3	12·3	282
20	2	13·3	12·9	217
		COOCH BEHAR		
10	1	42·5	42·5	305
		CUTTACK		
10	9	38·3	35·0	283
11	2	43·7	42·6	295
12	1	46·0	46·0	310
		DEOLALI		
10	5	27·9	26·5	277
11	3	27·7	27·3	287
12	1	23·0	23·0	310
		DIBRUGARH		
10	2	29·0	26·4	300
		DIBRUGARH (Contd.)		
11	2	31·7	30·3	297
12	1	36·0	36·0	315
13	1	40·5	40·5	315
14	1	34·0	34·0	305
15	1	30·5	30·5	295
16	1	17·0	17·0	315
		GADAG		
10	27	18·1	15·2	270
11	10	17·9	14·4	253
12	3	19·7	19·1	227
13	1	24·5	24·5	190
14	1	23·0	23·0	210
15	1	22·5	22·5	235
16	1	16·0	16·0	275
		GOPALPUR		
10	1	36·0	36·0	235
		HYDERABAD (Dn.)		
10	17	21·9	19·9	284
11	9	25·2	23·5	280
12	3	26·2	25·0	282
13	1	41·5	41·5	285
		JAGDALPUR		
10	14	25·4	23·6	254
11	9	29·5	28·5	240
12	3	30·0	27·9	253
13	1	44·0	44·0	235
14	1	50·0	50·0	240
15	1	39·5	39·5	240
		JHARSUGUDA		
10	2	39·7	37·7	266
		JODHPUR		
10	3	27·0	25·3	283
11	1	27·5	27·5	270
		MADHOSAGAR		
10	10	33·8	29·0	274
11	6	37·0	31·3	292
12	4	46·4	38·3	263
		MADRAS		
10	23	10·6	8·6	261
11	13	13·0	9·7	247
12	11	13·3	11·2	252
		MADRAS (Contd.)		
13	9	13·9	9·4	26
14	7	13·4	5·0	3
15	5	13·3	7·6	28
16	3	9·2	7·4	29
17	2	15·0	13·1	3
18	2	10·3	9·1	30
19	1	11·0	11·0	29
20	1	14·5	14·5	28
		MALEGAON		
10	16	27·3	25·6	27
11	5	27·1	24·9	28
12	3	32·5	32·3	29
13	3	40·2	40·2	29
14	1	28·5	28·5	29
		MANGALORE		
10	23	13·7	11·7	26
11	5	17·0	15·2	26
12	2	22·3	22·3	24
13	1	16·5	16·5	22
14	1	15·0	15·0	24
		MASULIPATAM		
10	14	18·5	14·8	26
11	3	23·5	21·4	23
12	2	22·2	22·2	23
13	1	10·0	10·0	22
		MINICOY		
10	21	8·2	2·5	23
11	20	8·0	1·5	21
12	15	8·5	3·7	16
13	13	8·9	2·2	19
14	9	12·7	2·8	18
15	7	17·8	7·7	13
16	3	18·8	9·1	12
17	2	17·7	7·6	30
18	2	18·3	7·8	33
19	2	24·5	9·5	33
20	2	26·3	15·5	29
21	1	11·0	11·0	14
22	1	10·0	10·0	9
23	1	16·5	16·5	8
24	1	26·5	26·5	7

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

JANUARY 1950

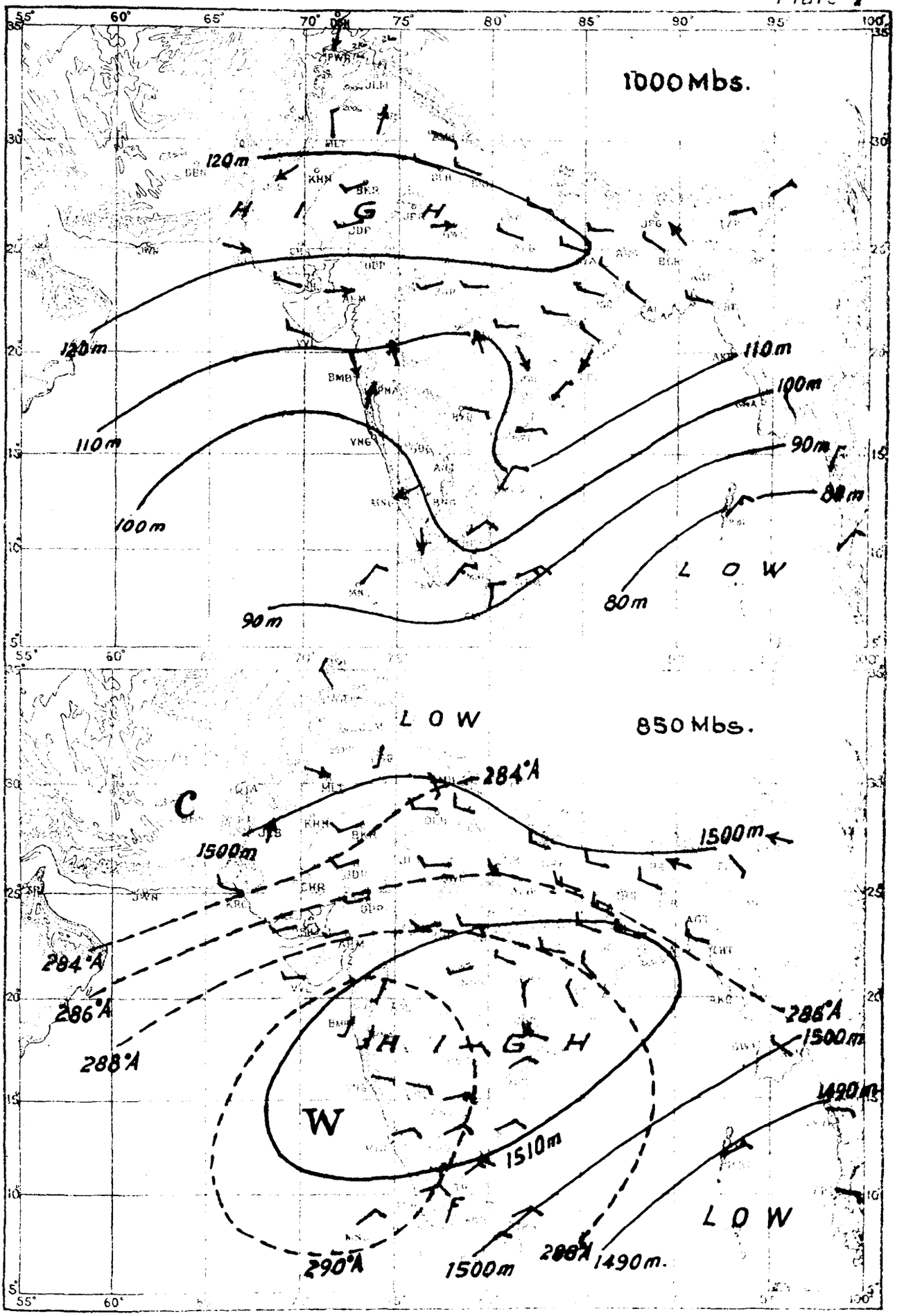
ht in Km	n	V	v	D
		NAGERCOIL		
10	35	10·0	2·7	46
11	13	11·1	3·5	93
12	7	8·3	6·3	193
13	2	3·7	1·7	191
14	1	6·0	6·0	260
		NAGPUR		
10	3	28·0	26·2	257
		NEW DELHI		
10	8	29·5	26·7	268
11	4	32·7	30·9	271
12	2	35·7	34·3	250
13	1	20·0	20·0	280
14	1	29·0	29·0	260
		POONA		
10	25	24·0	22·0	283
11	15	26·2	24·7	281
12	14	25·7	23·1	275
13	11	25·1	22·6	266
14	7	28·7	26·0	258
15	4	23·1	17·5	264
16	3	17·8	17·6	276
17	3	16·2	15·0	267
18	3	10·8	10·5	255
19	2	9·7	7·0	206
20	1	7·5	7·5	115
21	1	4·5	4·5	120
		PORT BLAIR		
10	15	10·8	9·6	265
11	9	10·4	9·7	260
12	9	9·4	8·1	242
13	9	10·7	8·9	211
14	7	9·8	7·1	213
15	7	10·5	4·0	247
16	6	11·3	4·9	118
17	5	7·1	4·8	106
18	5	8·0	4·2	107
19	4	9·3	8·3	80
20	3	10·8	9·8	88
21	2	5·7	1·3	171
22	1	3·0	3·0	60
23	1	12·0	12·0	115

Height in Km	n	V	v	D
		RAIPUR		
10	7	33·2	32·2	268
11	2	45·0	44·9	247
12	1	47·0	47·0	245
		TEZPUR		
10	15	19·2	17·2	288
11	3	27·7	23·4	302
12	2	47·0	41·9	306
		TIRUCHIRAPALLI		
10	29	9·9	6·4	285
11	5	12·0	9·7	249
12	4	15·0	14·5	251
		TRIVANDRUM		
10	12	6·7	3·0	263
11	12	7·7	3·1	252
12	10	9·4	5·3	230
13	8	9·2	5·1	186
14	4	10·5	1·3	299
15	1	12·5	12·5	90
16	1	12·0	12·0	105
		VENGURLA		
10	30	20·3	17·4	285
11	25	19·9	17·5	285
12	19	19·4	15·9	278
13	9	18·7	17·0	263
14	7	16·6	15·4	263
15	6	17·1	14·1	265
16	4	16·1	14·0	251
17	2	12·0	11·5	287
18	1	13·5	13·5	270
		VERAVAL		
10	7	29·0	28·2	283
		VISAKHAPATNAM		
10	7	26·6	21·6	259
11	5	30·1	27·4	266
12	1	36·0	36·0	270
13	1	34·0	34·0	275
14	1	20·5	20·5	275

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

JANUARY 1950

Plate I



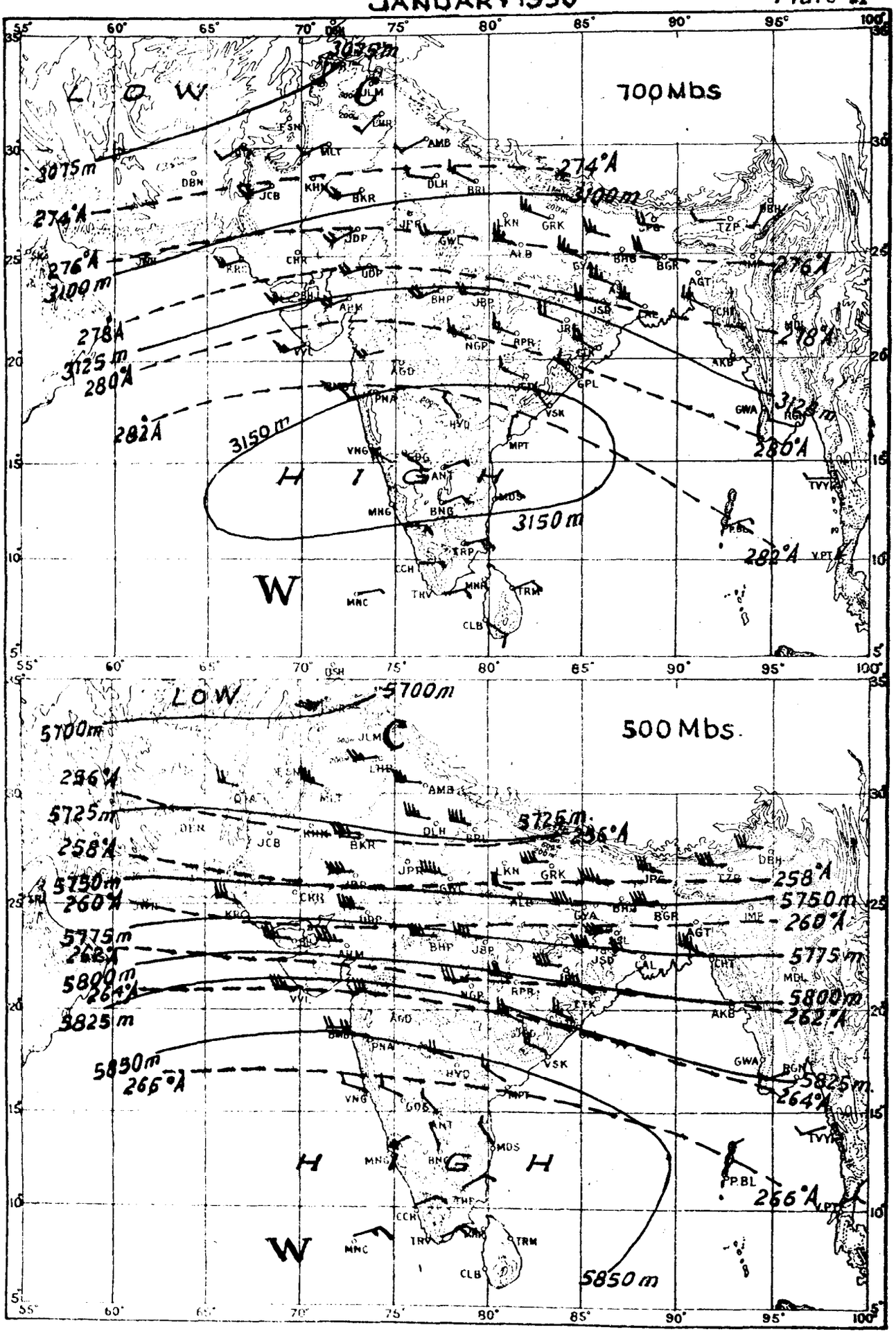
RESULTANT WIND ——— = 5 Knots, 10 Knots, 50 Knots.

------ Isotherms in degrees absolute. ——— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

JANUARY 1950

Plate II



RESULTANT WIND —— = 5 Knots, —— = 10 Knots, —— = 50 Knots.

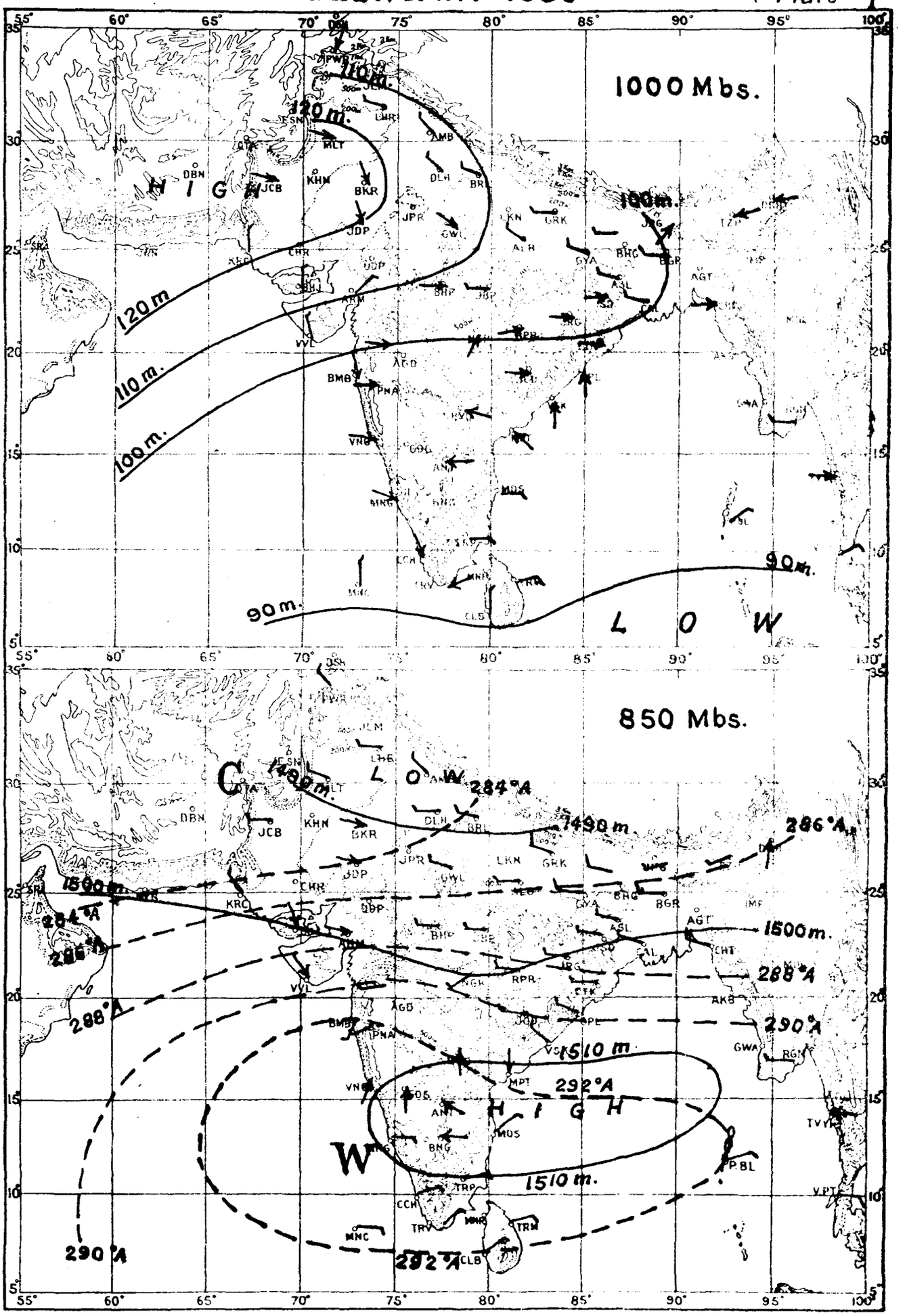
- - - - - - Isotherms in degrees absolute. —— Contours in geopotential metres.

G.P.Z. P.POONA, 53.

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

FEBRUARY 1950

Plate I



RESULTANT WIND ——\= 5 Knots; ——\= 10 Knots; ——◥ = 50 Knots.

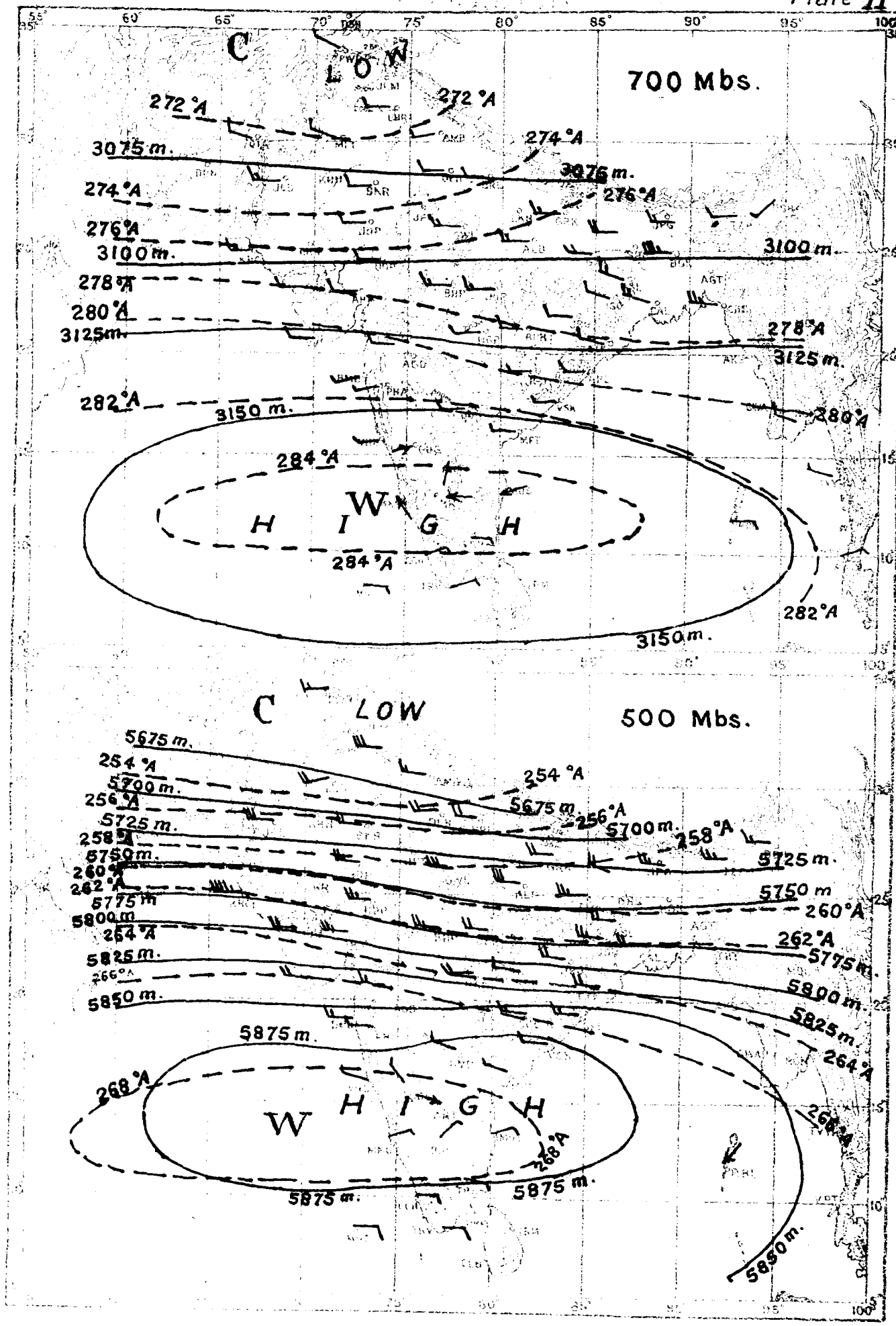
------ Isotherms in degrees absolute. ——— Contours in geopotential metres.

G.P.Z. & POONA, 53.

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

FEBRUARY 1950.

Plate II



5 Knots, 10 Knots, 50 Knots.

Isobars in degrees Absolute

Contours in geopotential metres.

Registered No. B-3097

INDIA WEATHER REVIEW, 1950

MONTHLY WEATHER REPORT

FEBRUARY

Published by authority of the Government of India

THE CHIEF FEATURES OF THE MONTH WERE-(i) a severe cold wave over most of the country; (ii) marked thunderstorm activity in Assam and Eastern Pakistan in the first week of the month and in the south of Peninsula during the second fortnight.

Six western disturbances affected the country during the month. The first three disturbances were fairly active and moved rapidly across the country in the first week. The third disturbance induced an active secondary over north Baluchistan on the 7th, which developed into a depression over the Punjab (P) on the next day and filled up over the Punjab (I) on the 10th. Under the influence of the secondary, widespread rain or snow occurred in north Baluchistan, the North-West Frontier Province, the Punjab (P), the Punjab (I) and west Uttar Pradesh on the 8th, in the North-West Frontier Province, the Punjab (I) and West Uttar Pradesh on the 9th and in Bihar on the next day.

In the wake of the depression, very steep pressure gradient set in over Western Pakistan and the western half of India and in the north and east Arabian sea. This gave rise to strong gusty winds in Western Pakistan, northwest India, the west Uttar Pradesh, the central parts of the country, the Deccan and the Konkan during the second week of the month resulting in widespread dust-fog or haze. The gusty winds and thick dust haze affected the operation of air services in northwest India. The cold dry air which swept down from the northern latitudes advanced as a severe cold wave from Western Pakistan and northwest India eastwards to the Uttar Pradesh and northeast India and southwards into the central parts of the country and the northern half of the Peninsula. Day and night temperatures over these regions fell to as low as 15° to 20° F. below normal, while in Rajasthan and the adjoining parts of the Punjab (I) night temperatures were near or below the freezing point from the 10th to 13th. The cold wave began abating from the 13th. A few deaths due to exposure to cold wave were reported from the Punjab (I), Uttar Pradesh and Gujarat. According to a Government report, the cold wave partly damaged the crops in certain areas of Rajasthan, the Punjab (I), Uttar Pradesh, Bihar, Madhya Bharat, Madhya Pradesh, Saurashtra and Bombay.

The remaining three western disturbances of the month were feeble and caused little or no precipitation. The details of the western disturbances are set out in the following table.

TABLE

No.	Period	Course	Region	Nature of Precipitation	Period	Remarks
	1st & 2nd Feb	N. W. F. P. to Punjab (I) hills	Punjab (I), West Uttar Pradesh	Widespread thundershowers	2nd Feb.	
	2nd to 6th Feb	Baluchistan to Punjab (I) hills.	North Baluchistan	Local showers	5th	
			Punjab (P), Kashmir*	Scattered rain or snow	6th	
			Punjab (I)	Scattered showers	6th	
			Kashmir *	Snow fall	6th & 7th	
	5th to 7th Feb	North Baluchistan to Punjab (I) hills	North Baluchistan	Local showers	6th	Induced an active secondary over north Baluchistan on 7th

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S. No.	Period	Course	Region	Nature of Precipitation	Period	Remarks
3 (a)	Secondary 7th to 10th, February	North Baluchistan to Punjab (I) (filled up)	North Baluchistan, Punjab (P)	Widespread rain or snow	8th	The secondary Western d bance deepened into a d sion on the 8th mornin severe cold wave affecte country in the wake of disturbance
			N. W. F. P., Punjab (I)	Widespread rain or snow	8th, 9th	
			West Uttar Pradesh	Local rain	8th	
				Widespread rain	9th	
			Punjab (P), East Uttar Pradesh	Local rain	9th	
			Bihar	Widespread rain	10th	
4	13th to 15th February	Baluchistan to west .West Uttar Pradesh hills	In and near the hills of the Punjab(I) and of west Uttar Pradesh	A few showers	15th	Feeble disturbance
5	19th to 21st February	Baluchistan to Kashmir	Northeast Baluchistan	Isolated falls of snow	20th	Feeble disturbance
6	23rd to 24th February	Baluchistan to Punjab (I) hills	—	—	—	Feeble disturbance

* Data very meagre.

A shallow low developed over Chota Nagpur and West Bengal on the 2nd evening and moved away eastwards a Eastern Pakistan by the 4th. Another low lay over sub-Himalayan West Bengal and adjoining areas between the 6t 8th. Under their influence, there was marked thunderstorm activity in Assam and Eastern Pakistan during the first wee

Madhya Pradesh, Hyderabad and the adjoining areas had local or widespread thundershowers between the 21s 23rd in association with a trough of low pressure over the Peninsula.

A well marked low pressure wave moved from southwest Bay of Bengal into the southeast Arabian Sea betwe 16th and 22nd. Under its influence, widespread rain occurred in Tamilnad, Travancore-Cochin and Malabar-south K on the 20th and 21st.

In the last week, local or widespread rain occurred on all days in Travancore-Cochin and on 2 or 3 days in M south Kanara, Mysore, Assam and Eastern Pakistan.

Nights were unusually cold in northwest India and Western Pakistan on most of the days during the month.

The month's rainfall was in moderate to large excess in Assam, Vindhya Pradesh, east Madhya Pradesh, Hyde Madras State outside Rayalaseema, in Mysore and Travancore-Cochin and normal in Orissa. It was in slight def Madhya Bharat and west Madhya Pradesh and in moderate to large defect elsewhere except in the Bay Islands, east than, Gujarat and Saurashtra and Kutch where no rain fell. Averaged over the plains of India, the month's rainfall was n

The mean maximum temperature was below normal in east Uttar Pradesh, northwest India, Gujarat, Saurasht Kutch and the Konkan and normal elsewhere.

The mean minimum temperature was below normal in northwest India, Madhya Bharat, Vindhya Pradesh, G Saurashtra and Kutch and the Konkan and normal elsewhere.

The mean relative humidity was in defect in west Bengal, Orissa, Chota Nagpur, Rajasthan, Madhya B Gujarat, Saurashtra and Kutch and Rayalaseema and normal elsewhere.

Cloud amount was above normal in the Bay Islands, Rayalaseema, Tamilnad, Malabar and south Kanara and T core-Cochin and normal in Assam, Bihar, Uttar Pradesh, south Hyderabad, coastal Andhradesa and Mysore. Else it was below normal.

Data from Jammu and Kashmir are incomplete.

Table I contains the divisional and sub-divisional means of rainfall, temperature, humidity and cloud amou the 13 chief political divisions and 28 sub-divisions. The stations whose observations are used for preparing these are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded with 24 hours ending at 8·30 hours I.S.T. of the date noted in the succeeding column; similarly the heaviest fall in 24 for any station denotes the amount recorded during the 24 hours ending at 8·30 hours I.S.T. of the date gi the succeeding column.

POONA 5,
dated the 7th August, 1950

C. RAMASWAMY,
for Director General of Observ

	Rainfall				Departure from normal of						Rainfall				Departure from normal of				
							0830 hrs. I.S.T.										0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.		Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Division	"		"		°	°	mb.	%		**Division**—*Contd.*	"	"	"		°	°	mb.	%	
Assam (including Manipur and Tripura)	1·86	1·46	+0·40	+ 27	-0·1	+1·8	-0·1	-5	+0·1	8 Madhya Bharat and Vindhya Pradesh	0·54	0·43	+0·11	+ 26	-1·4	-2·9	-2·3	-5	-0·8
West Bengal ...	0·51	1·06	-0·55	- 52	+0·6	+0·1	-1·2	-8	-0·9	9 Madhya Pradesh	1·01	0·70	+0·31	+ 44	-0·6	-0·6	-0·8	-1	-0·6
Orissa ...	0·91	1·01	-0·10	- 10	+0·7	-1·0	-1·8	-6	-0·7	10 Bombay (including Saurashtra & Kutch)	0·01	0·10	-0·09	- 90	-1·9	-2·7	-2·5	-5	-0·6
Bihar ...	0·44	0·99	-0·55	- 56	+0·8	-0·7	-1·4	-8	-0·6	11 Hyderabad ...	0·58	0·37	+0·21	+ 57	-0·3	-0·8	-1·5	-1	-0·3
Uttar Pradesh...	0·37	0·88	-0·51	- 58	-2·0	-1·2	-0·8	-2	-0·3	12 Madras (including Travancore-Cochin	1·31	0·50	+0·81	+162	-0·2	+0·4	-0·9	-3	+0·9
Punjab(I)(including PEPSU and Delhi) ...	0·58	1·15	-0·57	- 50	-2·2	-4·4	-1·7	-4	-0·7	13 Mysore ...	0·38	0·18	+0·20	+111	-0·5	+1·0	-0·1	+3	+0·3
Rajasthan ...	0·02	0·31	-0·29	- 94	-3·7	-4·5	-3·4	-14	-1·5	Mean of India ...	0·61	0·61	0	0	-1·1	-1·5	-1·6	-5	-0·4
Sub-Division										**Sub-Division**—*Contd.*									
Bay Islands ...	0	1·11	-1·11	-100	+1·8	0	-0·7	-3	+1·1	15 Madhya Pradesh, East	1·94	1·02	+0·92	+ 90	0	-0·2	-1·2	-3	-0·4
Assam (including Manipur and Tripura)	1·86	1·46	+0·40	+ 27	-0·1	+1·8	-0·1	-5	+0·1	16 Madhya Pradesh, West	0·43	0·50	-0·07	- 14	-1·1	-0·9	-0·6	+1	-0·8
West Bengal ..	0·51	1·06	-0·55	- 52	+0·6	+0·1	-1·2	-8	-0·9	17 Gujarat ...	0	0·10	-0·10	-100	-3·0	-3·6	-3·5	-8	-1·0
Orissa ...	0·91	1·01	-0·10	- 10	+0·7	-1·0	-1·8	-6	-0·7	18 Saurashtra and Kutch ...	0	0·12	-0·12	-100	-3·8	-4·1	-4·9	-10	-1·1
Chota Nagpur ...	0·52	1·55	-1·03	- 66	+1·9	-1·5	-2·1	-13	-1·0	19 Konkan ...	0·01	0·04	-0·03	- 75	-2·1	-2·4	-1·0	+3	-0·4
Bihar ...	0·40	0·73	-0·33	- 45	-0·1	-0·1	-0·9	-4	-0·3	20 Deccan (Desh)	0·03	0·10	-0·07	- 70	-0·2	-1·5	-1·1	-2	-0·2
Uttar Pradesh, East ...	0·28	0·73	-0·45	- 62	-2·0	-0·7	-0·6	-3	-0·3	21 Hyderabad, North ...	0·57	0·37	+0·20	+ 54	-0·6	-0·7	-1·2	+3	-0·4
Uttar Pradesh, West ...	0·45	1·03	-0·58	- 56	-1·9	-1·9	-1·0	-2	-0·3	22 Hyderabad, South ...	0·59	0·37	+0·22	+ 59	-0·5	-0·8	-1·7	-5	-0·2
Punjab (I) including PEPSU and Delhi)	0·58	1·15	-0·57	- 50	-2·2	-4·4	-1·7	-4	-0·7	23 Coastal Andhradesa	0·81	0·53	+0·28	+ 53	+0·5	-0·3	-1·4	-3	-0·4
Jammu and Kashmir	...	...	Data	incom	plete	...	...	...	...	24 Rayalaseema	0·07	0·22	-0·15	- 68	-0·8	+0·6	-2·1	-7	+0·9
Rajasthan, West	0·03	0·42	-0·39	- 93	-4·5	-5·8	-3·2	-13	-1·7	25 Tamilnad	1·93	0·63	+1·30	+206	-0·4	+1·1	-0·7	-3	+1·3
Rajasthan, East, (including Ajmer).	0	0·20	-0·20	-100	-2·9	-3·3	-3·6	-15	-1·3	26 Malabar and South Kanara	0·55	0·13	+0·42	+323	-1·0	+0·1	-0·5	-1	+0·9
Madhya Bharat	0·13	0·16	-0·03	- 19	-1·9	-3·3	-2·3	-7	-0·9	27 Mysore ...	0·38	0·18	+0·20	+111	-0·5	+1·0	-0·1	+3	+0·3
Vindhya Pradesh	1·07	0·78	+0·29	+ 37	-0·8	-2·3	-2·4	-3	-0·8	28 Travancore-Cochin	3·21	0·78	+2·43	+312	-0·7	-0·3	+0·8	+1	+3·1

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Rel hur
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Bay Islands																				
Port Blair ...	259	1003·7	-0·9	1001·0	87·3	+1·8	90	21	70·5	0	65	1	82·1	79·4	74·3	73·2	25·2	-0·7	25·4	68
Assam																				
Dibrugarh ...	348	1002·3	-1·9	998·7	71·6	-1·4	81	28	56·4	+1·7	51	14	61·5	65·8	58·8	61·0	15·9	+0·2	16·0	85
Sibsagar ...	317	1003·6	-1·5	1000·1	72·7	-0·4	80	31	56·4	+2·8	49	14,15	62·5	65·7	59·5	61·4	16·0	+0·1	16·4	84
Tezpur ...	258	1005·6	-1·9	1001·5	76·9	+0·5	84	22	58·1	+2·1	47	14	63·3	69·7	59·7	61·8	16·0	+0·5	15·2	81
Gauhati ...	182	1007·9	-1·3	1003·8	77·9	-0·1	87	22	55·5	+1·7	44	12	63·1	72·0	58·8	61·8	14·8	-0·5	14·5	76
Dhubri ...	115	1010·3	-1·3	1006·7	75·9	-1·1	86	22	57·8	+1·6	45	12	63·4	71·3	58·8	61·5	14·9	-0·2	14·0	75
Silchar ...	96	1011·0	-1·7	1006·4	76·4	-4·2	84	22	58·6	+2·9	47	2,14	64·2	69·8	61·0	62·5	17·1	+0·6	15·8	80
Tura ...	1215	971·7	...	968·9	75·0	...	83	22	56·6	...	41	12	63·4	67·7	57·3	59·6	13·4	...	13·9	66
West Bengal																				
Dum Dum ...	33	1012·8	...	1009·0	84·3	...	92	20	59·9	...	43	12	69·6	78·7	62·6	66·3	16·3	...	16·4	66
Calcutta ...	21	1013·1	-1·4	1009·4	85·1	+1·4	93	22	61·5	+2·1	45	12	70·1	77·8	63·0	64·9	16·4	-0·7	15·2	65
Saugor Island ...	10	1013·0	-1·7	1010·1	80·1	-0·5	87	8,9	66·5	+1·9	45	12	73·9	74·8	67·0	67·5	19·3	-0·6	19·4	68
Sandheads ...	32	1012·4	-1·8	1009·6	...	...	...	...	...	...	...	...	75·6	77·6	68·5	69·6	20·7	-1·9	21·1	68
Midnapore ...	149	1008·0	-2·0	1004·4	86·9	+0·5	87	21	59·0	-2·2	42	12,13	69·7	82·2	60·1	63·2	13·5	-1·9	11·2	54
Contai ...	36	1011·9	...	1008·7	83·3	...	91	2	63·3	...	47	12	70·6	77·7	64·3	67·1	18·2	...	18·1	69
Burdwan ...	106	1009·7	-1·9	1006·2	84·8	+1·0	94	21	58·6	+0·1	44	12	65·8	80·7	58 4	64·4	13·3	-1·6	13·1	61
Krishnagar ...	48	1012·4	-1·3	1008·6	85·5	+0·8	93	20,21	55·4	-0·3	40	12,13	65·8	78·8	60·1	65·8	15·4	+0·1	15·8	70
Asansol ...	414	999·4	-1·1	995·8	82·9	+0·6	94	20	57·2	-0·2	41	12	67·0	78·0	58·1	63·9	12·4	-1·1	14·1	57
Berhampore ...	62	1011·7	-1·5	1007·9	83·5	+2·0	92	20,21	56·0	-0·5	41	12	66·2	77·6	58·3	63·6	13·0	-1·8	13·8	59
Malda ...	103	1010·5	-1·4	1006·8	78·9	-0·4	87	21	53·8	-0·3	41	13	66·1	73·7	58·3	61·5	13·0	-1·3	13·4	60
Cooch Bihar ...	145	1009·6	...	1005·3	76·8	...	85	22	54·0	...	43	12	63·1	71·2	57·9	62·1	14·3	...	15·0	71
Jalpaiguri ...	271	1004·4	-1·3	1000·5	74·3	-2·6	83	21	53·7	-0·1	42	12	59·1	72·4	55·7	61·0	13·6	-1·0	13·1	79
Orissa																				
Balasore ...	65	1011·8	-1·2	1008·1	86·3	+1·5	94	2,3	62·1	+0·5	47	12	72·1	76·5	62·9	67·2	15·7	-1·6	18·3	57
Chandbali * ...	20																			
Puri ...	20	1013·3	-0·9	1009·9	83·4	+0·5	88	4	67·8	-1·3	59	12,14	75·6	78·6	68·2	70·5	20·1	-2·2	21·9	67
Cuttack ...	87	1010·6	-1·6	1006·7	89·1	+0·9	96	21	64·3	-0·5	53	13	69·5	83·9	63·7	66·1	17·3	-2·3	13·6	70
Gopalpur ...	56	1011·9	-1·0	1008·6	84·4	+0·9	90	3	66·4	-0·8	58	12	73·9	78·5	68·0	73·1	20·6	-0·2	25·3	73
Angul ...	455	998·4	-0·5	994·3	86·7	-0·1	94	21	60·1	-1·2	48	12	67·2	84·0	60·0	63·7	14·6	-1·8	10·8	64
Sambalpur ...	486	997·0	-1·1	993·1	87·0	+0·7	95	10,21	56·7	-2·7	42	13	65·8	83·6	58·0	63·0	12·8	-2·5	10·5	59
Jharsuguda ...	726	988·7	...	984·9	...	...	...	...	...	...	...	...	66·1	80·0	57·7	61·3	12·4	...	10·3	57
Titilagarh ...	691	989·7	...	985·7	88·6	...	97	10	60·3	...	47	12,13	68·5	84·8	59·6	64·6	13·3	...	12·0	57
Chota Nagpur																				
Purulia ...	835	985·2	...	981·3	83·5	...	94	20	58·0	...	46	12	66·9	78·6	56·8	62·2	11·3	...	12·2	50
Jamshedpur ...	423	999·2	-1·1	994·9	85·5	+2·2	95	24	57·3	-0·4	44	13,14	65·4	81·6	56·4	62·1	11·5	-3·4	10·3	54
Chaibasa ...	742	988·1	-1·0	988·8	86·3	+2·5	97	21	57·7	+0·3	45	12	65·3	82·5	56·5	62·1	11·5	-3·3	9·7	54
Ranchi ...	2,150	939·8	-1·0	937·0	80·8	+3·9	93	21	50·2	-4·8	37	11	63·9	73·4	52·6	56·2	8·9	-1·8	8·7	45
Hazaribagh ...	2,006	944·6	-0·9	941·9	77·6	+0·5	87	20,21	52·1	-2·1	39	11	62·6	71·5	52·2	55·9	9·1	-1·4	9·1	48
Daltonganj ...	725	988·8	-1·3	985·0	80·3	+0·4	89	21	51·5	-0·4	36	12	60·9	76·0	54·8	60·5	12·1	+0·6	11·0	65
Dhanbad ...	839	984·5	...	...	82·0	...	101	21	56·1	...	41	12	65·4	...	55·1	...	10·0	...	...	48
Bihar																				
Purnea ...	124	1009·7	-1·2	1005·8	78·3	-0·2	87	22	50·9	-0·7	37	13	61·8	70·7	56·4	60·9	13·0	-0·7	13·6	69
Saharsa ...	156	1006·2	...	1004·8	76·8	...	84	28	52·3	...	41	13	63·4	72·0	56·9	60·4	13·3	...	12·8	70

* Observations not available for a complete month.

Cloud amount (Oktas)			Rainfall. inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from:—																	STATION
											0830 hrs. I. S. T.										1730 hrs. I. S. T.								
Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs, I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bay Islands
4·0	+1·1	4·5	0	−1·11	0	...	0	−2·0	6·3	−0·8	3	17	4	0	0	0	0	1	3	2	18	7	1	0	0	0	0	0	Port Blair
																													Assam
5·7	+1·3	5·4	3·76	+1·32	0·78	6	10	+3·8	1·1	+0·1	4	5	9	0	2	3	1	2	2	3	6	4	0	1	1	0	1	12	Dibrugarh
5·6	−0·2	4·7	2·67	+0·65	0·92	25	6	+0·8	2·9	+1·1	7	4	2	2	3	2	1	0	7	7	10	1	1	1	0	0	2	6	Sibsagar
3·5	+0·5	2·8	0·63	−0·45	0·24	23	2	−0·7	2·1	−0·2	0	4	17	0	2	0	3	1	1	1	3	6	2	0	0	1	0	15	Tezpur
2·6	−0·1	3·8	0·48	−0·69	0·22	24	2	−0·6	2·2	+0·7	5	5	3	5	3	2	2	2	1	0	2	2	0	0	3	3	2	16	Gauhati
1·2	−0·8	1·6	2·12	+1·38	1·17	24	2	+0·5	3·5	0	2	7	5	1	4	4	1	0	4	1	0	1	1	2	7	5	4	7	Dhubri
3·3	+1·0	1·6	3·77	+1·88	1·53	11	5	+1·4	1·0	−0·5	0	2	8	3	0	0	0	1	14	0	0	0	0	0	0	3	0	25	Silchar
1·3	...	6·0	2·80	...	1·24	10	4	...	4·0	...	0	3	5	6	2	5	0	1	6	1	3	3	9	4	1	0	0	7	Tura
																													West Bengal
1·4	...	0·7	0·19	...	0·19	23	1	...	4·2	...	3	4	1	1	4	4	2	5	4	5	1	0	1	7	3	1	6	4	Dum Dum
1·3	−1·2	0·7	0·20	−0·97	0·20	23	1	−0·8	1·7	−0·9	4	3	0	1	1	7	0	3	9	2	0	0	0	3	7	2	4	10	Calcutta
1·1	−1·5	0·9	0	−1·15	0	0	0	−1·8	9·9	+3·2	4	6	2	2	1	8	2	3	0	2	2	0	3	14	5	1	0	1	Saugor Island
1·6	−0·2	1·2	0·02	−0·54	0·02	24	0	−1·1	...	...	4	3	1	3	2	8	3	2	2	3	3	2	0	5	13	1	1	0	Sandheads
0·5	−1·5	1·0	0·41	−0·94	0·41	24	1	−1·0	3·1	+1·2	7	5	1	0	4	3	0	0	8	7	5	1	0	4	2	0	1	8	Midnapore
1·3	...	1·0	0·10	...	0·10	23	1	...	5·5	...	10	3	0	0	4	6	0	2	3	4	0	0	3	15	4	0	0	2	Contai
1·0	−1·3	0·6	0·76	−0·56	0·62	3	2	0	2·5	+1·0	5	3	1	1	1	1	3	4	9	2	0	1	1	0	2	0	9	13	Burdwan
1·6	−0·6	0·6	0·43	−0·72	0·37	3	1	−0·8	2·7	+1·0	6	3	1	0	7	1	7	1	2	4	1	0	0	3	2	8	3	7	Krishnagar
0·9	−1·2	0·9	0·91	−0·34	0·68	3	2	−0·5	3·3	−0·3	1	1	0	1	2	1	4	10	8	2	0	1	0	0	0	4	7	14	Asansol
1·2	−1·0	1·3	0·30	−0·53	0·13	3	2	+0·3	1·2	−0·3	1	0	2	1	2	1	3	1	17	3	0	0	0	0	2	0	1	22	Berhampore
1·3	−0·1	1·6	0·82	−0·01	0·50	10	3	+1·3	3·2	+0·3	3	1	1	1	3	3	4	6	6	4	0	1	0	0	1	7	10	5	Malda
1·4	...	1·9	1·21	+0·40	0·60	24	2	+0·2	2·7	...	0	6	13	2	3	1	2	1	0	0	1	0	0	4	3	3	1	16	Cooch Bihar
1·6	−0·1	2·0	0·27	−0·40	0·17	24	2	+0·6	3·1	+1·8	7	8	3	1	3	0	2	0	4	1	0	0	1	0	6	6	0	14	Jalpaiguri
																													Orissa
1·3	−0·7	1·2	0·29	−1·08	0·25	23	1	−1·4	3·0	+1·3	8	6	0	0	1	8	0	4	1	0	1	0	13	9	1	1	0	4	Balasore
																										1			Chandbali *
1·2	−0·8	1·4	0·19	−0·73	0·17	23	1	−0·2	10·9	+2·4	3	5	0	0	1	9	5	5	0	0	2	0	5	7	13	1	0	0	Puri
1·4	−0·9	0·9	0 37	−0·41	0·27	23	2	+0·5	2·9	+1·4	0	2	0	0	0	1	4	2	19	0	0	1	1	3	2	2	1	18	Cuttack
1·2	0	1·3	2·31	+1·41	1·79	23	2	+0·8	8·0	+0·4	11	0	0	0	1	6	0	7	3	1	0	3	4	14	5	0	0	1	Gopalpur
1·3	−1·1	0·6	0·96	−0·17	0·96	23	1	−1·1	4·4	+0·9	4	1	0	0	0	1	10	7	5	4	7	3	4	2	2	3	3	0	Angul
0·8	−0·9	0·8	1·34	+0·40	1·12	23	2	0	2·2	−0·2	6	12	3	0	1	0	0	0	6	3	0	1	1	4	5	4	5	5	Sambalpur
0·6	...	1·1	1·52	...	1·30	23	2	...	...	...	14	3	0	1	1	0	0	1	8	0	0	0	0	2	1	2	3	20	Jharsuguda
0·5	...	0·8	0·91	...	0·74	23	2	...	1·7·	...	1	0	0	3	3	0	2	2	17	3	2	1	2	1	1	1	4	13	Titilagarh
																													Chota Nagpur
1·2	...	1·6	0·36	...	0·20	3	2	...	2·3	...	4	2	0	0	2	5	4	9	2	6	4	0	2	0	1	3	6	6	Purulia
0·7	−1·6	1·1	0·46	−1·49	0·40	23	1	−2·7	3·1	+0·8	1	0	0	0	0	2	13	9	3	3	1	1	1	0	4	2	7	9	Jamshedpur
1·0	−1·1	1·4	0·49	−1·00	0·49	23	1	−1·5	1·6	0	1	0	0	0	1	13	1	2	10	2	3	0	2	0	8	2	4	7	Chaibasa
0·8	−1·3	1·2	0·18	−1·62	0·13	23	1	−2·4	3·7	−0·3	3	0	0	0	3	0	3	3	16	2	0	0	0	0	2	0	2	22	Ranchi
1·5	−0·7	1·5	0·44	−0·82	0·29	23	2	−0·5	5·5	0	0	2	1	1	4	5	7	3	5	10	2	0	0	1	0	4	10	1	Hazaribagh
1·5	−0·1	1·0	1·03	−0·24	0·78	23	3	+0·6	2·6	+0·2	2	1	5	4	3	0	4	1	8	3	4	1	1	0	0	5	11	3	Daltonganj
...	...	...	0·37	...	0·32	3	1	...	4·7	...	0	1	1	2	0	7	7	3	7	...	...	...	...	...	...	...	...	...	Dhanbad
																													Bihar
1·4	−0·3	1·4	0·55	−0·07	0·18	24	2	+0·7	2·9	+0·8	0	2	3	0	0	6	5	1	11	1	0	0	0	0	6	5	0	16	Purnea
1 4	...	1·0	0·64	...	0·21	10·23	3	...	2·7	...	0	5	0	0	0	8	8	0	7	0	0	0	0	0	2	8	0	18	Saharsa

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relat humid %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Bihar *(Contd)*																					
Darbhanga ...	161	1008·3	-1·2	1005·0	76·5	-1·4	84	27	53·9	+1·0	44	12,13	59·6	71·5	55·8	61·9	13·3	-0·7	14·7	76	+3
Motihari ...	218	1006·2	-1·2	1002·8	76·7	-0·1	84	28	49·7	-0·3	37	12	61·6	70·6	56·9	61·3	13·9	+0·3	14·1	74	-2
Patna ...	173	1007·8	-1·5	1004·5	78·3	+0·5	85	27,28	55·0	+0·2	43	12	62·4	74·0	55·1	59·7	11·3	-1·6	10·9	59	-4
Dehri ...	352	1001·5	...	998·2	79·8	...	88	21	55·7	...	44	12	63·3	74·5	55·4	59·4	11·3	...	10·6	58	...
Gaya ...	365	1001·0	-1·4	997·7	80·1	+0·7	88	21	53·3	+0·4	39	12	61·9	75·7	54·3	59·7	11·1	-0·4	10·3	57	-3
Dumka ...	489	996·1	-2·0	992·6	81·6	+1·1	90	20,21	...	...	...	...	63·5	77·2	55·2	60·7	11·0	-2·3	10·7	54	-5
Sabour ...	122	1009·4	-1·2	1005·9	77·7	-0·5	86	21	50·5	-1·0	37	12	62·2	72·0	56·9	61·8	13·2	-1·2	14·5	70	-9
U. P., East																					
Gonda ...	360	1001·8	...	995·3	75·3	-2·7	86	28	50·4	-1·0	39	12	56·2	70·2	51·9	60·6	11·0	-1·3	13·6	74	-1
Gorakhpur ...	254	1004·2	-1·7	1001·5	76·3	-1·4	84	22,27,28	52·7	+0·6	41	12	59·8	72·8	54·7	60·0	12·5	+0·1	12·0	67	-4
Azamgarh ...	255	1003·8	...	1002·3	80·7	...	87	27	48·6	...	38	12	56·0	73·3	52·4	62·3	11·9	...	14·3	73	...
Banaras ...	250	1005·0	-1·5	1002·0	77·7	-1·7	86	27	52·2	+0·1	40	12	58·9	75·1	53·8	60·1	11·9	-0·7	11·3	65	-4
Allahabad (Bamrauli) ...	322	1002·8	-1·2	999·8	77·5	-1·7	84	27,28	51·4	+0·4	38	11	59·1	73·9	53·7	59·6	11·5	+0·4	10·9	68	+2
Fatehpur ...	375	1001·4	...	998·0	76·7	-3·1	84	28	50·6	-1·7	37	12	58·3	74·6	52·4	58·7	10·5	-1·9	9·6	63	-8
Banda ..	398	1000·3	...	996·5	78·8	...	88	9	50·6	...	38	11,12	59·2	76·8	52·8	59·5	10·6	...	9·7	55	...
Kanpur ...	413	999·7	-0·8	997·0 (d)	76·2	-0·8	85	28	50·7	-0·3	37	12	56·6	72·9	50·7	57·9	9·9	-1·1	9·7	64	-4
Lucknow ...	371	1001·4	-0·7	999·0	76·2	-2·4	85	28	50·3	-1·1	40	11	56·8	72·0	51·7	59·3	11·0	-0·4	11·6	69	+1
Bahraich ...	407	1001·0	+0·9	997·0	...	...	...	...	50·0	-0·9	38	11,12	59·4	70·4	54·1	60·2	11·7	-0·2	13·5	71	-3
U. P., West																					
Jhansi ...	823	986·1	-0·7	982·3	79·8	-1·1	94	9	51·4	-1·2	37	12	57·4	76·7	49·8	59·9	8·9	-1·2	·9·7	51	-3
Agra ...	553	994·0	-1·9	992·6	75·2	-2·2	86	9	48·1	-0·1	36	11	52·4	73·5	45·5	58·2	7·3	-1·8	9·4	55	-8
Mainpuri ...	516	996·3	-0·6	992·9	75·4	-2·3	85	22,27,28	47·6	-2·2	36	11	53·6	71·4	49·7	59·1	10·3	-0·3	11·5	74	+8
Aligarh ...	615	993·0 (d)	..	990·3 (e)	73·5 (d)	-2·2 (d)	85	21,28	46·8 (d)	-3·8 (d)	35	11	52·0 (d)	70·4 (e)	47·1 (d)	56·2 (e)	8·8	-1·7	9·3	67 (d)	-1 (d)
Bareilly ...	568	993·6	-1·2	991·7	73·3	-1·8	84	21	48·6	-1·5	37	11,12	54·4	70·3	49·3	55·9	9·9	-1·5	8·5	68	-7
Meerut ...	728	988·5	...	...	71·2	...	82	28	46·5	...	37	11,12	50·9	...	46·1	...	8·3	...	...	67	...
Roorkee ...	899	982·3	-0·9	980·0	69·9	-2·6	81	28	45·2	-1·8	36	11,12	50·2	67·0	47·4	55·0	9·9	-0·5	9·4	80	+1
Dehra Dun ...	2239	936·1	-0·9	934·7	67·6	-1·6	76	24	44·5	-2·1	31	11	51·0	63·1	46·4	52·8	9·0	0	9·4	71	-2
Punjab (I)																					
New Delhi ...	714	989·7	-0·3	987·2	71·6	-3·1	82	23	46·0	-3·2	35	11	51·7	69·0	44·6	52·6	6·9	-3·1	6·2	53	-15
Hissar ...	725	989·8	+0·2	987·4	73·3	-2·9	85	25	40·9	-6·3	29	11	47·7	70·5	42·6	54·5	7·2	-1·7	7·3	63	-2
Karnal ...	818	985·1	...	983·4	70·0	...	80	21	45·4	...	36	11,12	50·0	67·8	44·5	53·1	7·5	...	7·5	73	...
Ambala ...	892	984·4	-1·1	980·6	72·0	-1·1	81	22,24	44·8	-3·0	36	11	49·9	66·9	46·4	53·9	9·2	-0·8	8·4	72	-1
Patiala ...	822	985·1	...	983·3	68·4	...	79	28	44·4	...	35	11	49·2	64·4	45·5	52·8	8·8	...	8·6	73	...
Ludhiana ...	811	985·8	-0·7	984·6	69·4	-1 8	81	24	42·4	-5·1	32	11	47·5	66·3	44·4	53·1	8·7	-1·1	7·9	78	+2
Ferozepore ...	657	992·1	...	989·8	66·0	...	81	25	40·9	...	34	11,12	46·5	65·7	43·3	53·8	8·5	...	8·6	77	...
Amritsar ...	756	987·7	...	986·2	66·2	...	78	27,28	40·2	...	31	11	45·7	63·4	44·0	53·0	9·2	...	8·8	88	...
Jammu & Kashmir																					
Srinagar ...	5205	843·0	-1·1	841·0	44·4	+0·3	55	28	28·9	-0·6	21	11	31·5	42·0	30·1	37·2	5·0	-0·7	5·3	87	-1
Gulmarg ...	8709	...	...	...	...	...	...	closed	during	winter	mon	ths ...	...	...	...	...	...	...	...	...	...
Dras (R) ...	10,059																				
Leh ...	11,529	662·9	-1·0	661·4	22·3	-10·7	35	1	0·3	-10·0	-11	18	5·0	15·7	3·2	13·2	1·0	-0·8	1·8	58	-3
Skardu (R) ...	7505																				
Gilgit (R) ...	4890																				
Misgar (R) ...	10,190																				

(R) Register not recieved. (e) Mean of 26 days (d) Mean of 27 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from ;—																	STATION
											0830 hrs. I. S. T.										1730 hrs. I. S. T.								
Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 h.s. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bihar *(Contd)*
2·0	+0·3	1·1	0·31	−0·22	0·11	23	1	−0·4	1·6	−0·5	1	2	2	2	1	2	8	1	9	0	0	1	0	0	0	6	1	20	Darbhanga
3·0	+0·3	2·1	0·31	−0·29	0·25	10	1	−0·4	2·9	+0·6	0	2	7	1	0	1	9	3	5	0	1	2	0	0	0	10	1	14	Motihari
1·7	−0·2	1·2	0·10	−0·64	0·09	10	0	−1·6	4·2	+1·4	0	1	1	2	3	11	5	2	3	1	1	1	0	2	1	10	6	6	Patna
1·4	...	1·3	0·12	−0·72	0·07	21	0	−1·8	3·9	...	2	0	1	2	3	11	4	3	2	2	7	0	0	0	1	0	16	2	Dehri
1·2	−0·6	0·5	0·46	−0·39	0·27	23	1	−0·8	4·4	+0·4	1	2	2	5	10	4	4	0	0	8	1	0	0	0	0	11	5	3	Gaya
1·0	−0·6	0·9	0·18	−0·76	0·18	6	1	−1·0	2·5	+1·0	0	1	0	0	0	8	0	8	11	0	2	0	1	0	12	0	9	4	Dumka
1·4	−1·0	1·3	1·30	+0·51	0·68	24	3	+1·3	4·1	+0·6	1	0	1	1	2	6	9	3	5	2	0	1	0	0	1	8	10	6	Sabour
																													U. P., East
1·8	−0·4	1·8	0·62	−0·29	0·33	20	2	−0·3	3·7	+0·6	0	1	2	0	0	0	11	4	10	0	0	1	0	0	1	11	5	10	Gonda
1·6	+0·1	1·7	0·43	−0·20	0·17	21	2	+0·2	2·9	+1·2	1	3	3	0	0	0	16	1	4	0	1	0	0	1	2	17	0	7	Gorakhpur
1·2	...	1·5	1·28	...	0·85	19	2	...	3·2	...	0	0	1	0	2	7	8	4	6	1	2	1	0	0	1	11	8	4	Azamgarh
1·4	−0·5	1·8	0·11	−0·60	0·09	21	0	−1·9	4·5	+1·7	0	1	3	0	2	8	6	2	6	4	4	0	0	0	1	14	5	0	Banaras
1·0	−1·2	1·4	0·25	−0·38	0·20	20	2	+0·3	3·5	+0·3	0	3	2	2	0	5	6	2	8	2	6	2	0	0	0	7	6	5	Allahabad
1·5	−0·3	1·4	0·45	−0·26	0·33	21	1	−1·4	3·5	+0·9	1	2	5	0	1	1	2	7	9	2	2	3	0	0	0	1	13	7	(Bamrauli) Fatehpur
0·9	...	1·1	0	...	0	...	0	...	2·9	...	2	2	4	0	0	2	16	1	1	2	5	2	0	0	1	18	0	0	Banda
1·5	+0·2	0·9	0·04	−0·62	0·01	4days	0	−1·6	4·4	+0·3	4	1	3	1	0	4	6	2	7	5	1	2	1	0	5	9	3	2	Kanpur
2·0	0	1·7	0·19	−0·53	0·17	20	1	−0·6	1·9	+0·2	3	1	0	0	0	5	8	5	6	3	4	1	0	0	1	14	3	2	Lucknow
1·5	−0·1	1·4	0·14	−0·77	0·07	9,21	0	−2·0	3·4	+1·3	1	1	1	1	0	0	5	5	14	0	0	0	0	0	3	6	4	15	Bahraich
																													U. P., West
0·9	−0·5	0·9	0	−0·45	0	...	0	−1·1	2·5	−0·2	2	3	0	0	0	3	8	2	10	0	1	0	0	0	5	6	11	5	Jhansi
1·2	−0·9	0·6	0	−0·49	0	...	0	−1·1	2·4	−0·8	2	1	0	0	0	2	2	4	17	5	0	0	0	0	0	4	7	12	Agra
2·7	+0·5	1·8	0·08	−0·46	0·08	2	0	−1·2	2·0	+0·3	0	0	1	1	0	1	9	5	11	0	0	0	2	0	3	15	0	8	Mainpuri
2·0 (d)	0 (d)	1·6 (e)	0	−0·76	0	...	0	−2·1	4·5 (e)	+1·0 (e)	1	1	1	0	0	1	5	4	15	1	0	1	0	0	0	2	12	12	Aligarh
2·3	0	2·4	0·18	−0·79	0·16	9	1	−0·9	3·4	+1·4	3	0	1	1	0	2	3	6	6	4	0	0	0	0	0	13	5	4	Bareilly
2·1	...	...	0·63	−0·39	0·28	2	3	+0·8	5·0	...	3	0	2	0	0	0	6	13	4	...	...	...	...	...	...	...	...	...	Meerut
2·2	−0·4	1·8	1·11	−0·41	0·51	9	3	+0·2	2·6	+0·4	0	0	0	1	0	0	0	10	17	0	0	0	1	0	0	0	18	9	Roorkee
2·8	−1·1	2·6	1·61	−0·86	0·98	9	3	−0·8	2·0	+0·3	4	6	0	0	1	2	1	1	13	0	1	0	0	0	13	5	6	3	Dehra Dun
																													Punjab (I)
1·9	−0·6	1·9	0·10	−0·73	0·03	5,6	0	−1·7	8·0	...	1	1	0	1	0	4	12	8	1	5	2	1	0	1	1	3	15	0	New Delhi
1·4	−0·8	1·1	0·27	−0·27	0·14	8	2	+0·8	4·2	+0·3	4	2	1	1	1	3	2	7	7	8	0	0	0	1	2	3	12	2	Hissar
2·2	...	2·0	0·70	...	0·26	2	3	...	4·0	...	0	2	1	0	0	2	13	8	2	1	1	0	1	1	2	11	11	0	Karnal
1·1	−1·8	1·7	1·24	−0·63	0·70	9	3	−0·1	4·5	+1·2	0	0	0	1	0	0	0	9	18	0	0	0	0	0	0	0	14	13	Ambala
2·8	...	3·0	0·88	...	0·43	9	3	...	5·2	...	7	0	1	1	0	0	2	8	9	12	0	0	1	0	0	2	13	0	Patiala
2·9	+0·1	3·0	0·70	−0·65	0·30	8	3	+0·3	2·6	+0·9	0	2	0	1	0	1	7	8	9	0	3	0	1	0	1	1	13	9	Ludhiana
2·0	...	2·1	0·43	...	0·25	8	2	...	1·6	...	1	0	0	1	1	1	7	1	16	5	2	0	0	1	2	2	14	2	Ferozepore
2·5	...	2·9	1·52	...	1·02	9	2	...	3·0	...	3	1	0	2	0	1	2	6	13	6	0	1	2	1	0	1	14	3	Amritsar
																													Jammu & Kashmir
4·6	−1·6	4·5	1·96	−0·88	1·04	9	5	−1·2	3·1	+0·7	6	0	0	2	0	0	1	11	8	3	0	1	2	0	0	6	11	5	Srinagar
																													Gulmarg
																													Dras (R)
4·2	−1·1	4·6	0·71	+0·40	0·37	9	2	+1·1	2·7	+1·3	0	14	0	0	0	2	0	0	12	0	1	2	0	1	6	0	1	17	Leh
																													Skardu (R)
																													Gilgit (R)
																													Misgar (R)

(c) Mean of 28 days

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relativ humidit %	
		Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Rajasthan, West																					
Sri Ganganagar ...	580	993·7	...	990·8	69·0	−4·6	82	27	38·9	−6·8	27	11	48·1	65·7	43·6	52·4	7·6	−2·6	7·3	70	−10
Bikaner ...	734	989·8	+0·6	987·1	72·8	−6·3	83	25	40·0	−7·1	28	11	48·4	71·3	41·9	56·5	6·1	−1·7	7·6	54	−5
Jaisalmer ...	793	987·1	...	984·4	74·7	...	86	27	45·6	...	34	2	51·6	72·5	41·1	52·2	4·1	...	4·1	34	..
Jodhpur ...	736	989·6	+1·6	986·5	76·9	−3·7	86	26	48·6	−4·0	35	10	53·1	75·2	42·6	54·6	4·6	−2·9	5·3	32	−15
Phalodi ...	783	987·5	...	986·0	73·6	...	85	25	44·4	...	33	9	48·1	72·3	40·7	55·7	5·3	...	7·7	46	...
Barmer ...	638	992·7	+0·9	989·0	77·7	−3·6	87	8,25	50·3	−5·3	43	2	54·2	76·4	44·3	56·2	5·4	−5·6	6·7	38	−20
Rajasthan, East																					
Sikar ...	1418	965·7	...	963·5	73·0	...	83	28	39·0	...	27	11,13	46·7	70·1	39·1	51·5	4·7	...	4·7	45	...
Jaipur ...	1431	965·0	−0·7	962·4	74·3	−2·7	83	9,26,27	47·0	−3·6	30	10,11	57·2	71·9	44·7	51·8	4·5	−3·5	4·3	29	−19
Ajmer ...	1593	959·7	−0·4	956·9	73·1	−3·9	82	26	46·8	−3·1	34	11,13	51·9	70·7	41·5	50·3	4·7	−3·8	4·1	36	−16
Kotah ...	843	985·6	−0·5	981·9	79·5	−2·5	90	9	51·8	−3·6	40	11	57·4	77·1	46·5	55·7	5·9	−3·0	5·4	37	−11
Jhalawar ...	1053	997·4	−0·6	973·8	80·0	−2·3	90	9	50·0	−2·8	37	11	55·2	79·0	44·9	56·7	5·4	−4·1	5·7	39	−13
Udaipur ...	1710	948·8	...	945·7	77·2	...	85	26	47·2	...	34	11	55·1	75·0	44·9	56·7	6·1	...	8·3	41	...
Madhya Bharat																					
Gwalior ...	681	990·6	...	987·3	77·2	...	91	9	45·8	...	33	12	57·2	74·2	47·4	56·6	6·8	...	7·8	43	...
Guna ...	1571	959·3	−0·9	956·6	79·3	−1·9	88	26,27,28	45·5	−4·5	30	11	53·7	76·5	45·6	55·9	7·3	−2·1	6·9	53	−7
Neemuch ...	1626	958·7	−0·3	955·7	78·3	−2·5	86	26	49·2	−2·7	36	11	55·2	76·3	43·7	54·9	5·1	−3·4	6·0	34	−13
Ratlam ...	1596	959·1	...	955·9	80·8	...	87	4 days	52·6	...	42	12	55·1	78·9	45·6	56·8	6·6	...	7·0	46	...
Indore ...	1823	950·4	−1·1	947·0	81·1	−2·0	87	5 days	48·9	−3·4	31	11	57·4	79·3	47·4	59·4	7·2	−2·1	9·2	44	−4
Bhopal ...	1643	957·0	−1·0	953·9	81·4	−1·4	89	20	51·9	−2·7	35	11	60·3	79·3	50·0	58·7	8·1	−1·4	8·4	45	−4
Bairagarh ...	1714	954·3	−1·3	951·6	80·9	−1·9	89	6	51·2	−3·4	35	11	59·1	77·6	48·2	56·4	7·0	−2·2	7·2	41	−7
Madhosagar ...	757	988·1	...	984·9	77·5	...	90	9	50·6	...	41	11,12	55·9	75·0	47·9	55·8	6·5	...	6·7	47	...
Vindhya Pradesh																					
Nowgong ...	750	988·4	−0·6	984·8	77·6	−2·4	91	9	48·2	−2·5	33	12	57·5	75·6	50·0	56·7	9·1	−1·7	7·2	56	−10
Sutna ...	1041	977·6	−1·1	974·1	77·7	+0·5	86	27,28	50·7	−1·5	36	12	57·9	77·1	51·7	59·2	10·3	−0·4	9·2	62	+3
Umaria ...	1506	961·4	...	958·3	80·7	−0·4	92	21	48·7	−3·0	33	12	59·4	74·1	52·5	60·5	10·6	−3·9	11·5	60	−2
Madhya Pradesh East																					
Gondia ...	1026	978·2	...	974·8	84·3	...	90	9,31	58·0	...	44	12	65·5	82·1	58·0	66·0	13·1	...	14·6	61	...
Pendra ...	2040	943·3	−1·5	940·8	79·4	+1·3	89	21	54·6	+0·1	38	12	64·1	74·0	53·5	58·3	9·7	−1·3	10·3	49	−10
Champa ...	805	986·1	...	982·2	85·9	...	94	20,21	58·9	...	47	12	64·8	82·9	57·5	64·4	12·9	...	12·5	62	...
Raipur ...	979	979·7	−1·0	976·2	85·3	−0·7	90	20,21	60·7	+0·6	45	12	67·1	83·2	57·9	62·9	12·2	−0·9	11·5	54	−2
Kunker ...	1318	968·1	−0·7	964·8	86·0	+0·3	93	20,21	58·1	−0·3	40	12	66·7	82·4	59·8	67·2	14·4	−0·8	15·9	66	−2
Chanda ...	634	991·6	−0·8	987·4	88·1	−2·3	95	9	59·6	+0·1	41	12	67·1	85·8	59·1	65·0	13·8	−0·6	12·4	59	+2
Jagdalpur ...	1815	951·6	−0·7	947·4	88·2	+1·6	94	20	54·7	−1·3	42	14	64·5	83·4	57·8	62·4	13·6	−2·3	10·8	67	−4
Madhya Pradesh West																					
Buldhana ...	2133	940·0	...	937·2	84·0	...	90	27	60·9	...	40	11	64·5	81·8	54·4	62·5	10·5	...	11·5	52	...
Akola ...	925	981·1	−1·1	977·0	88·9	−1·7	96	27	57·3	−0·5	41	11,12,13	62·0	86·5	53·0	62·8	9·7	0	8·8	51	+7
Amravati ...	1213	971·4	−0·8	967·5	87·4	−1·9	93	4 days	61·5	−0·6	44	11	66·2	85·7	55·4	63·5	10·2	−0·1	10·1	46	0
Yeotmal ...	1481	962·3	...	958·7	87·9	...	95	9	61·1	...	45	11	68·2	84·5	57·3	63·3	11·1	...	10·3	50	...
Khandwa ...	1044	977·2	−1·2	973·2	86·7	−2·0	94	20	53·9	−2·0	37	11	62·6	84·4	51·7	63·3	8·2	−0·7	10·4	42	−3
Hoshangabad ...	992	979·4	−1·2	975·5	84·5	−0·4	92	28	55·6	−1·9	43	12	62·1	82·2	52·7	60·9	9·3	−1·4	8·7	48	−3
Sagar ...	1808	950·9	−1·5	947·9	78·9	−1·7	87	6,21,27	54·5	−1·2	38	11	60·2	76·3	49·5	55·9	7·8	−0·7	7·3	44	0
Jabalpur ...	1289	969·1	−0·8	965·5	82·9	+1·5	91	21	51·5	+0·5	36	12	60·4	78·7	53·0	61·4	10·3	−0·9	10·8	57	−3
Seoni ...	2027	944·8	−0·8	940·8	82·0	−1·0	91	9	55·3	+0·4	39	11	60·4	78·1	52·8	60·9	10·6	−0·1	11·3	60	+7

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from ;—																	STATION
											0830 hrs. I.S T.											1730 hrs. I.S.T.										
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Rajasthan, West
0·7	-2·6	1·1	0·13	-1·00	0·08	8	0	-2·0	...	...	2	0	3	2	1	1	1	7	11	2	2	1	0	0	0	4	14	5	Sri Ganganagar
0·8	-1·2	0·8	0·03	-0·24	0·03	5	0	-0·7	2·8	-0·8	0	8	0	6	0	2	0	1	11	0	15	0	0	0	1	1	8	3	Bikaner
0·9	...	0·6	0	...	0	...	0	...	6·3	...	1	12	0	3	0	4	0	0	8	1	11	0	1	1	3	0	11	0	Jaisalmer
1·0	-1·2	0·5	0	-0·24	0	...	0	-0·6	5·0	-2·0	0	21	1	0	0	1	1	0	4	6	6	7	0	0	1	5	3	0	Jodhpur
0·8	...	0·6	0	-0·19	0	...	0	-0·5	6·4	...	3	4	1	7	5	4	2	2	0	8	9	0	0	0	3	4	4	0	Phalodi
0·4	-1·7	0·5	0	-0·28	0	...	0	-0·6	5·7	+0·8	5	1	0	0	0	2	2	13	5	3	10	3	0	0	4	2	3	3	Barmer
																													Rajasthan, East
1·3	...	1·6	0·02	...	0·02	9	0	...	4·4	...	2	0	9	9	0	3	1	1	3	7	2	2	0	0	1	9	7	0	Sikar
0·8	-1·3	1·0	0	-0·32	0	...	0	-0·8	4·2	+0·3	3	6	8	1	0	1	1	0	8	7	0	2	2	2	1	5	7	2	Jaipur
0·6	-1·1	0·4	0	-0·26	0	...	0	-0·7	4·4	+2·3	3	3	0	1	0	2	4	2	13	3	2	0	1	0	4	7	5	6	Ajmer
0·4	-1·3	1·0	0	-0·21	0	...	0	-0·5	1·7	0	0	1	0	0	0	1	2	1	23	2	0	0	0	0	0	1	4	21	Kotah
0·2	-1·3	0·1	0	-0·08	0	...	0	-0·4	3·5	+0·9	3	2	0	0	0	2	2	3	16	6	4	0	0	0	2	8	5	3	Jhalawar
0·1	...	0·5	0	-0·14	0	...	0	-0·5	2·7	...	5	2	1	1	0	1	1	5	12	2	7	2	2	3	3	3	4	2	Udaipur
																													Madhya Bharat
1·2	...	0·9	0	...	0	...	0	...	1·5	...	3	1	0	0	0	0	4	8	12	4	2	2	0	0	0	0	15	5	Gwalior
0·6	-0·6	0·4	0	-0·19	0	...	0	...	4·1	+1·3	3	5	2	3	1	2	2	2	9	3	2	2	0	0	1	3	16	1	Guna
0	-1·1	0·3	0	-0·15	0	...	0	-0·4	4·1	-0·5	3	11	1	1	0	0	1	4	7	2	8	3	1	0	2	3	4	5	Neemuch
0·4	...	1·3	0	...	0	...	0	...	6·6	...	8	9	1	1	0	2	3	0	4	2	4	3	1	0	8	7	3	0	Ratlam
0·6	-0·7	0·5	0	-0·14	0	...	0	-0·5	4·9	+2·5	2	8	4	1	0	1	2	2	8	4	1	0	0	0	9	1	4	3	Indore
0·3	-1·2	0·9	0·54	+0·39	0·54	23	1	+0·5	4·0	+1·2	3	6	1	1	0	1	4	3	9	2	2	1	1	0	4	8	9	1	Bhopal
0·3	-1·2	0·9	0·37	+0·22	0·37	23	1	+0·5	6·5	+1·7	5	8	1	0	1	4	1	5	3	2	4	0	2	0	5	2	12	1	Bairagarh
0·3	...	0·8	0·01	...	0·01	2	1	...	4·5	...	2	5	0	0	2	3	1	5	10	6	8	1	1	0	0	3	9	0	Madhosagar
																													Vindhya Pradesh
1·6	-0·5	1·3	0	-0·57	0	...	0	...	2·6	+1·0	0	5	1	0	2	12	0	1	7	1	6	2	0	0	1	7	9	2	Nowgong
1·0	-0·9	1·1	0·57	-0·21	0·57	23	1	-0·8	3·0	+0·4	0	1	4	2	1	5	2	1	12	4	3	4	1	0	0	8	4	4	Sutna
1·2	-0·9	1·8	2·65	+1·65	2·19	23	3	+1·1	2·5	0	0	1	2	2	1	1	0	1	20	4	3	1	0	1	2	3	7	7	Umaria
																													Madhya Pradesh East
1·3	...	1·0	1·23	...	0·75	21	2	...	2·7	...	5	3	3	3	3	1	0	3	7	2	0	0	5	1	6	0	2	12	Gondia
0·9	-0·9	1·5	2·98	+2·13	1·63	23	2	+0·3	4·9	+1·5	4	1	0	2	12	1	2	4	2	10	2	0	1	7	4	2	2	0	Pendra
1·1	...	1·1	1·76	...	1·01	23	3	...	4·5	...	8	2	3	2	0	1	1	7	4	3	2	0	4	2	2	12	3	0	Champa
0·9	-0·7	0·9	2·37	+1·50	1·26	22	2	+0·2	4·7	...	5	2	3	2	4	5	2	1	4	4	0	1	2	2	2	7	5	5	Raipur
1·9	+0·1	1·8	2·24	+1·38	2·08	22	2	-0·1	0·7	-2·0	1	0	0	0	2	0	0	0	25	0	0	0	0	0	2	2	1	23	Kanker
1·0	+0·4	1·7	0·95	+0·14	0·95	22	1	-0·3	3·0	+0·9	0	3	0	9	0	0	0	3	13	3	2	2	9	1	1	0	6	4	Chanda
0·6	-1·0	1·2	1·16	+0·08	0·70	23	2	+0·4	3·2	+1·3	1	2	1	2	2	4	0	1	15	0	3	0	7	4	1	2	7	4	Jagdalpur
																													Madhya Pradesh West
0·3	...	1·4	0·05	...	0·05	22	0	...	5·2	...	3	0	0	4	4	2	0	15	0	1	3	0	0	2	4	0	18	0	Buldhana
0·4	-1·0	0·9	0·76	+0·46	0·65	22	2	+1·4	3·7	+0·6	0	1	2	3	9	1	1	4	7	4	2	1	2	1	1	3	14	0	Akola
0·8	-0·6	0·9	0·46	+0·02	0·46	21	1	-0·2	5·6	+1·6	0	28	0	0	0	0	0	0	0	0	5	0	3	0	11	0	9	0	Amravati
0·6	...	1·2	1·29	...	1·23	22	1	...	7·3	...	1	3	8	5	4	0	4	3	0	2	4	2	1	4	7	4	4	0	Yeotmal
0·5 (f)	-0·6	0·8 (f)	0·05	-0·11	0·05	21	0	-0·4	3·8	+0·4	5	5	0	0	2	5	5	0	6	7	0	0	0	2	5	0	13	1	Khandwa
1·2	-0·2	1·6	0	-0·38	0	...	0	-0·9	2·6	+0·4	2	2	5	4	0	0	1	1	13	2	3	1	0	2	7	5	1	7	Hoshangabad
0·7	-0·9	1·5	0·15	-0·32	0·10	20	1	-0·2	10·4	+1·5	2	7	4	4	5	1	3	1	1	2	5	2	1	2	3	6	7	0	Sagar
0·7	-0·9	1·1	0·78	+0·02	0·48	23	2	+0·3	2·9	+1·2	3	1	2	9	1	5	0	0	7	7	3	1	3	1	1	7	1	4	Jabalpur
0·6	-1·0	1·3	0·60	-0·21	0·55	22	1	-1·0	4·5	+1·7	5	2	0	1	2	2	2	0	14	8	1	0	4	8	3	1	3	0	Seoni

(f) Mean of 25 days.

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Rel hum	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	2
Madhya Pradesh West *(Contd.)*																					
Chhindwara ...	2,248	936·5	...	933·7	81·4	...	88	9	52·8	...	37	12	58·8	78·5	51·7	58·6	10·2	...	8·8	60	.
Betul ...	2,144	940·3	...	937·2	82·1	...	89	20	51·4	...	34	11,12	61·4	77·4	52·5	59·0	9·9	...	9·6	53	.
Nagpur ...	1,022	978·5	-1·1	974·6	87·0	-1·2	93	9,21	57·6	-2·3	41	12	65·1	84·9	56·3	64·2	11·1	-0·7	11·3	55	+
Gujarat																					
Deesa* ...	466	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.
Surat ...	39	1013·4	+0·3	1009·4	87·3	-2·1	97	28	56·3	-3·7	48	10	59·9	81·1	53·5	64·0	11·2	-2·4	12·7	64	+
Ahmedabad ...	163	1008·7	-0·6	1005·4	84·0	-3·9	90	24,25,27	57·5	-2·5	46	11	59·1	82·5	47·9	60·5	6·3	-3·7	8·1	37	-
Dohad ...	1,093	976·1	...	972·5	83·3	-3·4	91	25	53·9	-2·6	36	11	59·1	81·3	47·9	59·2	6·3	-4·2	7·3	37	-1
Baroda ...	115	1010·1	...	1006·3	86·8	-2·6	93	6,25,27	49·3	-5·5	35	10	57·3	83·8	48·8	61·5	7·9	-3·7	8·6	50	-
Saurashtra & Kutch																					
Bhuj ...	343	1003·5	+0·5	1000·6	78·9	-4·8	88	27,28	49·7	-6·8	38	11	54·3	77·7	45·6	54·6	6·5	-5·9	4·2	45	-1
Dwarka ...	37	1014·0	-0·1	1011·6	76·6	-1·9	88	28	60·3	-2·9	49	11	62·4	73·0	55·1	60·6	11·5	-5·3	12·5	59	-1
Jamnagar ...	60	1013·3	0	...	77·1	-5·5	87	28	53·2	-2·6	40	11	57·7	...	51·8	...	10·5	-3·4	...	67	-
Rajkot ...	432	999·3	-0·3	995·9	82·5	-4·0	90	12,28	50·0	-4·3	39	10	55·2	81·3	47·5	61·7	7·8	-3·1	10·0	50	-
Veraval ...	26	1013·5	-0·4	1010·5	81·6	...	93	28	53·8	...	43	11	59·8	75·3	49·4	64·4	7·4	...	15·7	43	-1
Bhavnagar ...	55	1012·5	-0·5	1008·9	84·3	-3·0	90	28	53·4	-4·2	41	10	55·9	82·9	44·8	58·6	5·2	-4·8	5·9	34	-1
Konkan																					
Dahanu ...	15	1012·7	...	1010·3	78·8	...	80	28	59·2	...	48	11	62·2	76·3	57·3	68·1	13·8	...	19·8	67	..
Bombay ...	35	1012·1	-0·7	1009·5	82·0	-1·1	87	6	65·7	-1·7	58	11	70·9	77·6	63·9	68·0	17·1	-1·9	19·1	66	-
Alibag ...	23	1013·0	+0·1	...	79·5	-3·1	82	5 days	61·7	-3·2	53	11	66·4	...	63·2	...	18·4	+0·9	...	83	+1
Harnai ...	66	1010·4	...	1008·2	77·8	...	83	15	68·3	...	57	11	71·7	75·9	63·9	69·4	16·8	...	21·6	63	..
Devgad ...	117	1008·3	...	1005·9	81·9	...	87	13	67·3	...	63	11	69·6	80·5	64·1	70·8	17·9	...	21·4	73	..
Vengurla ...	29	1011·7	...	1008·7	86·5	...	91	2	63·9	...	55	11	68·9	81·9	63·9	70·1	18·0	...	19·7	75	..
Marmagao ...	202	1005·5	-0·9	1002·7	81·7	-2·2	87	4	68·8	-2·4	64	11	72·9	79·5	66·9	70·5	19·8	-2·1	21·4	71	-
Honavar ...	85	1010·5	...	1007·4	85·3	...	90	7	68·0	...	64	11	73·7	81·5	67·2	73·8	19·9	...	25·0	75	..
Deccan (Desh)																					
Jalgaon ...	660	990·8	...	986·7	89·4	...	99	28	...	...	...	...	62·0	88·1	50·7	62·5	7·6	...	7·9	39	..
Malegaon ...	1,432	964·4	-0·8	960·0	88·7	-1·2	95	8,9	51·5	-3·2	36	11	60·9	85·7	49·5	60·7	7·0	-2·1	6·9	38	-
Deolali ...	1,874	948·8	...	...	85·9	...	91	6,8,28	49·0	...	31	11	60·5	...	50·4	...	8·4	...	...	46	..
Ahmednagar ...	2,154	939·5	-1·3	935·6	89·2	+0·7	94	8,9	54·9	-1·0	40	11	62·4	87·0	51·7	61·4	8·8	-0·8	8·2	45	+
Poona ...	1,834	950·4	-1·0	946·7	89·9	-0·6	95	8	53·9	-1·2	40	11	60·0	85·6	53·5	62·7	11·4	+0·4	10·2	64	+
Sholapur ...	1,570	959·2	-0·9	955·2	92·9	+0·4	97	8	61·7	-1·0	50	11	68·3	90·4	54·0	63·8	9·3	-0·8	9·5	39	-
Miraj ...	1,817	950·8	-1·1	946·5	91·2	+0·7	97	9	56·9	-2·1	49	25	63·1	88·2	53·7	64·4	10·4	-2·7	11·1	49	-
Kolhapur ...	1,885	948·9	...	945·1	89·3	...	94	9	57·6	...	52	11	62·5	86·1	54·5	63·2	11·3	...	10·5	59	..
Bijapur ...	1,950	946·3	-1·1	942·4	90·6	-0·4	97	9	62·2	-1·7	52	11	69·0	89·1	57·2	65·7	11·2	-1·8	11·9	46	-
Belgaum ...	2,562	926·5	-0·6	923·5	87·3	-1·0	93	9	57·4	-1·9	51	10	65·2	83·3	56·5	62·3	12·1	-0·3	10·7	57	+
Gadag ...	2,131	940·4	-0·8	936·4	91·7	+1·0	95	8	64·3	-0·6	52	11	71·4	88·9	59·0	64·6	12·0	-2·2	10·9	46	-1
Hyderabad, North																					
Aurangabad ...	1,905	948·3	-1·3	944·9	87·9	-0·7	93	9	57·5	-2·1	43	12	62·8	86·1	50·6	60·9	7·6	-1·5	8·1	40	
Parbhani ...	1,350	965·6	...	962·7	90·4	...	97	27	59·1	...	44	11	66·7	87·8	54·5	63·3	9·5	...	10·0	39	.
Ramagundam ‡ ...	527																				
Nizamabad ...	1,250	969·5	-1·5	965·9	89·7	-1·1	95	6,9	62·9	+0·9	49	11	67·7	87·8	59·4	65·1	13·5	-0·7	11·0	59	+
Bidar ...	2,178	938·5	...	935·2	87·7	-0·5	94	9	63·8	-1·7	49	11	68·5	85·8	59·1	64·7	13·3	-0·1	12·4	56	+

* Data not reliable. ‡ Data incomplete

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Madhya Pradesh West *(Contd.)*
0·8	...	1·4	1·89	...	1·49	22	3	...	4·0	...	3	3	4	1	2	0	3	1	11	4	1	0	1	3	7	3	7	2	Chhindwara
0·6	...	1·7	0·37	...	0·14	22	1	...	3·5	...	1	2	5	6	2	1	3	2	6	2	6	2	1	3	2	8	4	0	Betul
0·9	−0·9	1·4	0·68	+0·03	0·39	21	2	+0·6	4·1	...	7	1	3	2	1	1	2	7	4	1	3	3	2	6	8	2	3	0	Nagpur
																													Gujarat
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Deesa *
0·3	−0·7	0·2	0	−0·08	0	...	0	−0·2	4·3	+1·1	4	5	2	1	0	0	0	3	13	0	5	0	0	0	5	1	16	1	Surat
0·3	−0·9	0·1	0	−0·08	0	...	0	−0·2	3·8	+0·2	3	7	5	0	0	0	4	4	5	3	4	2	0	0	1	5	7	0	Ahmedabad
0·1	−1·4	0·1	0	−0·04	0	...	0	−0·2	7·0	+3·8	3	6	5	2	2	2	2	1	5	3	6	0	0	4	8	4	2	1	Dohad
0·2	−0·9	0·3	0	−0·21	0	...	0	−0·3	2·0	−0·3	1	4	0	0	0	0	0	0	23	3	5	1	0	0	2	3	2	12	Baroda
																													Saurashtra & Kutch
0·2	−1·0	0·1	0	−0·17	0	...	0	−0·4	3·3	−1·3	0	0	1	0	1	1	1	1	23	8	7	0	0	0	0	2	6	5	Bhuj
0·3	−1·5	0·3	0	−0·24	0	...	0	−0·5	11·3	+2·6	9	12	4	0	0	0	1	2	0	6	4	2	0	0	0	4	12	0	Dwarka
0·2	−1·0	...	0	−0·08	0	...	0	−0·2	2·9	−4·0	0	4	3	0	0	0	0	0	21	...	...	...	...	...	..	...	...	...	Jamnagar
0·1	−1·5	0·2	0	−0·09	0	...	0	−0·3	6·4	+1·6	3	5	4	0	0	2	2	2	10	8	5	4	0	0	0	2	8	1	Rajkot
0·3	−0·8	0·2	0	−0·07	0	...	0	−0·2	11·8	...	16	6	1	0	0	0	1	3	1	2	0	0	0	3	1	15	7	0	Veraval
0·1	−1·2	0·1	0	−0·06	0	...	0	−0·2	4·5	+0·3	1	0	1	0	1	4	13	2	6	2	5	11	4	1	0	1	2	2	Bhavnagar
																													Konkan
0·5	...	0·3	0	...	0	...	0	...	8·2	...	1	1	13	11	0	0	1	1	0	9	0	0	0	0	1	10	8	0	Dahanu
0·4	−0·6	0·1	0	−0·08	0	...	0	−0·1	5·9	−1·1	3	6	8	3	1	0	0	0	7	0	0	0	0	0	0	4	16	8	Bombay
0·4	−0·6	...	0·02	−0·01	0·02	9	0	−0·2	3·7	−1·7	2	8	4	2	0	0	0	0	12	...	...	...	...	...	...	...	...	...	Alibag
0·3	..	0·3	0	...	0	...	0	...	9·8	...	6	3	14	3	0	0	1	1	0	0	0	0	0	0	2	9	17	0	Harnai
1·0	...	0·9	0	...	0	...	0	...	10·1	...	3	10	14	0	0	0	0	1	0	1	0	0	0	0	0	11	16	0	Devgad
1·3	...	0·6	0	...	0	...	0	...	...	...	12	2	0	0	0	0	0	1	13	0	0	0	0	0	2	20	6	0	Vengurla
1·5	+0·1	1·1	0	0	0	...	0	0	7·4	+1·2	4	6	14	2	0	0	1	1	0	1	0	0	0	0	1	14	12	0	Marmagao
1·9	...	1·5	0	−0·06	0	...	0	−0·1	2·7	...	0	5	15	2	0	0	0	0	6	0	0	0	0	0	0	18	9	1	Honavar
																													Deccan (Desh)
0·7	...	0·7	0	−0·11	0	...	0	−0·4	4·2	...	1	2	4	5	1	4	9	0	2	3	1	1	1	0	2	10	10	0	Jalgaon
0·6	−0·5	0·6	0	−0·09	0	...	0	−0·2	4·0	−0·2	0	0	0	0	0	1	2	4	21	1	6	1	0	0	7	4	5	4	Malegaon
0·4	...	...	0	...	0	...	0	...	4·3	...	1	3	1	1	2	0	2	0	18	...	...	...	...	...	...	...	...	...	Deolali
0·4	−0·4	0·6	0	−0·13	0	...	0	−0·3	3·8	−1·0	3	1	0	0	0	0	3	7	14	1	3	0	4	0	8	3	8	1	Ahmednagar
0·5	−0·3	0·4	0	−0·06	0	...	0	−0·2	2·3	−1·9	0	0	0	0	0	6	9	0	13	2	1	1	0	0	1	15	6	2	Poona
0·5	−0·4	0·8	0·09	−0·04	0·09	22	0	−0·3	1·8	−3·7	1	2	0	2	2	2	0	3	16	2	0	0	1	1	3	2	0	19	Sholapur
1·0	+0·1	0·9	0	0	0	...	0	0	3·8	−0·8	1	1	2	3	1	2	4	3	11	0	1	3	2	1	3	15	2	1	Miraj
0·6	...	0·1	0	...	0	...	0	...	6·0	...	0	2	4	1	0	2	5	3	11	1	0	3	0	0	1	16	2	5	Kolhapur
6·8	−0·2	1·0	0·06	−0·03	0·06	21	0	−0·2	3·8	+0·4	8	2	0	2	3	1	2	5	5	3	2	1	3	4	3	3	5	4	Bijapur
0·5	−0·6	0·3	0	−0·05	0	...	0	−0·1	3·6	+0·7	1	3	12	1	1	0	6	0	4	0	0	12	0	0	2	14	0	0	Belgaum
2·0	+1·1	2·7	0·11	−0·05	0·11	21	1	+0·6	4·6	+0·3	0	3	5	3	0	0	4	3	10	0	2	7	5	1	1	3	3	6	Gadag
																													Hyderabad North,
0·4	−0·7	1·0	0	−0·17	0	...	0	−0·4	5·3	−0·1	2	3	8	0	1	2	3	0	9	1	1	3	2	3	6	11	1	0	Aurangabad
0·3	...	0·9	0·38	+0·09	0·37	21	1	+0·3	...	...	0	0	0	0	0	0	28	0	0	4	2	2	0	1	0	19	0	0	Parbhani
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ramagundam ‡
1·0	−0·2	0·9	1·53	+0·86	11·3	21	2	+0·8	3·3	+0·8	2	1	2	2	0	1	0	1	19	4	2	4	2	0	2	1	0	13	Nizamabad
1·1	−0·3	1·1	0·38	+0·02	0·32	22	1	+0·3	7·0	+0·8	3	1	4	2	5	7	3	3	0	3	1	2	4	6	5	2	4	1	Bidar

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relati humid %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Heightest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Hyderabad, South																					
Gulbarga ...	1,503	961·2	-1·3	957·0	91·0	-1·3	97	8	62·7	-1·6	53	12	70·0	89·5	57·5	64·6	11·1	-1·6	10·6	44	-4
Raichur ...	1,311	967·7	-1·1	963·9	91·4	-0·7	98	9	68·0	-0·4	59	11	73·0	89·2	62·8	68·9	15·0	-0·7	15·0	54	0
Hyderabad (Begumpet) ...	1,778	952·3	-0·8	948·9	89·5	+0·2	97	9	61·8	-0·7	52	14	69·6	85·4	60·5	65·6	14·3	-1·9	13·5	58	-7
Hanamkonda ...	881	982·8	-1·3	979·0	89·3	-0·2	97	9,10	65·3	-0·6	55	12,13	70·9	86·2	63·2	65·4	16·3	-2·9	12·0	63	-7
Khammameth ...	367	1000·6	...	996·5	92·1	...	99	8,9	...	...	...	...	73·5	90·1	69·4	78·5	22·7	...	28·0	83	...
Coastal Andhradesa																					
Nellore ...	66	1010·9	-1·1	1007·4	91·3	+1·9	98	9,11	69·4	-0·4	63	4,5	75·9	83·1	69·8	72·8	20·1	-2·5	22·9	74	-7
Ongole ...	38	1012·1	...	1008·5	88·1	...	93	7	69·7	...	64	2,4,8	76·5	82·9	70·7	72·5	23·0	...	22·5	74	...
Masulipatam ...	10	1013·5	-0·9	1009·7	85·6	-0·5	89	7,8,11	69·3	+0·7	61	2	75·7	81·3	72·6	73·7	26·0	+1·0	25·0	85	+4
Kakinada ...	26	1013·1	-0·8	1009·4	87·5	+1·9	95	9	69·6	-0·1	65	2	78 6	81·8	71·7	73·5	28·3	+0·3	24·4	70	-5
Visakhapatnam ...	126	1009·3	-1·1	1006·1	83·4	-0·1	89	8	70·0	-0·6	65	1,19	75·8	79·6	69·1	71·8	21·3	-1·1	23·1	70	-3
Calingapatam ...	19	1013·0	-1·2	1009·7	85·2	-1·2	91	2,9,20	67·3	-0·5	62	19	70·3	80·3	66·6	72·8	20·6	-1·7	24·2	82	+3
Rentachintala ...	348	1001·3	...	996 7	93·6	+1·2	101	9	67·9	-1·2	56	14	74·3	91·6	65·1	68·7	17·0	-4·5	13·6	58	-12
Rayalaseema																					
Cuddapah ...	428	997·9	-1·3	993·8	94·7	+0·4	99	10	70·6	+1·0	61	1	79·1	89·3	67·6	72·6	17·9	-2·9	19·8	53	-11
Bellary ...	1,473	962·2	-1·0	958·1	91·6	-2·2	97	9	67·5	+1·4	61	2,7	72·0	89·7	60·5	65·3	12·8	-2·2	10·3	48	-6
Kurnool ...	923	981·2	-0·8	976·7	93·0	-0·5	98	9	65·4	-0·6	56	3,6	73·1	90·5	62·9	66·6	15·1	-1·1	11·5	54	-5
Anantapur ...	1,147	973·3	...	968·6	92·1	...	96	9	66·3	...	57	1,2,6	74·3	90·0	62·7	66·4	14·2	...	11·5	49	...
Tamilnad																					
Pamban ...	37	1011·3	-0·9	1007·8	84·8	0	89	24,25	75·8 (c)	+0·8	71	4,8,11	79·4	80·7	74·9	75·5	27·5	+0·5	27·8	80	+1
Mathurai ...	437	997·9	-1·0	993·3	89·9	-0·4	97	10,11	70·3	+0·8	62	4	76·9	87·5	71·1	71·4	23·4	+0·1	19·1	73	-3
Nagapattinam ...	31	1012·0	-0·8	1008·6	83·6	-1·2	92	25	73·4	+0·2	65	7	77·4	80·8	72·6	74·2	25·2	0	25·9	79	+2
Tiruchi ..	295	1003·1	-1·3	998·6	90·4	-1·1	97	10,11	69·6	+0·3	62	4,7,8	75·1	87·2	71·0	72·2	24·1	-0·4	20·2	81	0
Coimbatore ...	1,341	967·1	-1·1	962·7	90·1	-0·8	96	9	68·9	+2·4	63	8	72·8	87·5	66·7	68·9	19·6	-1·8	15·8	71	-7
Salem ...	913	981·6	-1·2	976·6	92·3	-0·8	99	9,10	68·8	+1·8	62	4,7	72·9	88·9	67·1	69·2	20·0	-1·6	12·5	72	-2
Kallakurichi ...	416	998·9	...	994·2	90·9	...	99	11	68·4	...	60	4	74·1	87·7	68·5	69·5	21·3	...	16·4	74	..
Cuddalore ...	39	1011·9	-1·0	1008·2	84·6	-0·5	89	25,26	70·3	+0·3	63	7	77·0	80·9	72·0	73·8	24·5	-0·8	25·3	78	-(
Vellore ...	703	989·2	-0·6	984·7	90·3	+1·4	98	11	67·1	+0·9	57	4	73·5	87·5	67·7	69·9	20·5	-1·1	17·1	73	-(
Madras ...	51	1011·8	-0·7	1008·2	87·5	-0·8	95	11	70·1	+1·7	65	2,4,5	76·3	81·6	70·9	72·3	23·4	-0·9	22·9	76	-(
Arogyavaram ...	2,299	935·3	...	931·7	87·0	...	92	9	63·9	...	56	1	70·8	84·0	61·9	63·0	15·3	...	11·1	60	..
Malabar And South Kanara																					
Mangalore ...	72	1010·2	-0·6	1006·8	85·6	-2·6	92	2	72·2	-0·3	68	26	75·9	81·9	70·6	73·9	25·0	+1·3	22·2	75	+(
Kozhikode ...	27	1011·2	-0·9	1007·4	89·1	+0·6	91	5,15,28	73·4	+0·4	69	6	77·6	85·0	72·3	76·5	24·7	-0·4	27·3	76	-(
Palghat ...	319	1001·6	...	996·6	94·9	...	99	12	73·4	...	68	4,7	77·7	90·7	71·8	76·1	23·9	...	24·1	74	..
Mysore																					
Chitaldrug ...	2,405	931·2	-0·9	927·3	89·6	0	94	9	66·3	+0·1	60	9	71·9	87·5	60·3	63·9	13·1	-2 0	10·7	50	-(
Hassan ...	3,149	907·5	...	904·1	86·6	-0·4	90	9	60·7	+1·2	52	6	64·5	83·7	60·7	67·9	16·6	+0·2	16·9	80	+1(
Bangalore ...	3,021	911·7	-0·8	908·3	85·2	+0·4	89	8,10,11	63·1	+3·1	56	1	67·8	82·0	61·2	61·7	15·8	-0·6	10·5	68	-(
Mysore ...	2,518	927·8	-0·9	924·0	87·7	-1·2	91	11,12,16	65·5	+1·3	59	1,7	70·2	85·9	64·1	65·2	18·0	+0·7	12·8	72	+(

(c) Mean of 26 days.

Cloud amount (Oktas)			Rainfall inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																			STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.									
Mean 0830 hrs. IST	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Hyderabad South,
0·7	0	0·9	0·48	+0·21	0·28	21	2	+1·5	6·1	+0·7	2	8	3	1	5	2	2	1	4	1	0	3	2	9	5	6	2	0	Gulbarga
1·0	0	1·7	0	−0·28	0	...	0	−0·6	5·1	−0·2	2	6	3	7	1	0	1	8	0	1	3	6	8	1	1	2	5	1	Raichur
1·5	−0·3	1·1	1·56	+1·20	0·87	21	2	+1·1	4·6	+0·8	4	0	1	2	1	0	2	1	17	4	2	5	8	0	0	3	1	5	Hyderabad (Begumpet)
1·9	−0·6	1·0	0·30	−0·28	0·19	22	2	+0·9	6·1	+1·2	4	1	1	10	10	0	0	1	1	8	2	1	8	5	0	0	4	0	Hanamkonda
2·8	...	2·0	...	...	...	...	...	...	4·6	...	3	2	7	9	3	0	0	0	4	6	0	5	6	3	0	3	1	4	Khammameth
																													Coastal Andhra desa
2·2	−0·2	1·8	0·09	−0·15	0·09	23	0	−0·5	3·3	0	1	0	0	0	4	0	1	1	21	0	0	16	11	1	0	0	0	0	Nellore
2·4	...	1·4	0·02	...	0·02	23	0	...	5·0	...	2	2	1	4	2	5	3	1	8	0	1	7	19	1	0	0	0	0	Ongole
3·1	+1·0	1·5	1·34	+0·81	1·31	23	1	+0·4	5·7	+1·9	4	5	1	7	1	2	0	3	5	0	0	0	18	9	0	0	0	1	Masulipatam
1·1	−1·5	0·6	1·22	+0·90	0·92	23	2	+1·4	5·9	+1·2	1	10	0	3	0	5	0	8	1	0	1	1	24	0	2	0	0	0	Kakinada
1·0	−1·5	1·3	0·26	−0·68	0·26	23	1	−0·1	4·0	+0·8	0	3	2	0	0	2	9	1	11	0	0	5	8	10	5	0	0	0	Visakhapatnam
2·2	+0·4	2·0	1·86	+1·25	1·50	23	2	+0·7	7·2	+2·2	4	1	0	0	0	0	10	13	0	0	0	5	8	9	6	0	0	0	Calingapatam
2·3	−0·6	1·6	0·07	−0·46	0·07	23	0	−1·3	4·6	−0·3	0	3	2	4	2	4	1	3	9	3	2	9	8	2	0	1	1	2	Rentachintala
																													Rayalaseema
0·7	−0·7	2·1	0·05	−0·07	0·05	23	0	−0·2	6·8	−1·2	0	0	7	0	0	0	0	0	21	0	0	16	2	1	0	0	0	9	Cuddapah
4·3	+2·9	4·0	0·03	−0·15	0·03	23	0	−0·3	2·9	0	3	0	2	5	0	0	0	5	13	0	0	5	5	0	1	0	4	13	Bellary
1·7	+0·6	2·0	0·11	−0·17	0·07	23	0	−0·5	3·9	+0·4	1	1	1	6	4	2	2	0	11	2	1	3	8	3	3	1	2	5	Kurnool
1·4	...	1·5	0·11	−0·19	0·11	20	1	+0·6	6·0	...	2	1	4	2	9	1	2	3	4	1	8	9	2	1	0	1	2	4	Anantapur
																													Tamilnad
4·5	+1·9	4·1	1·66	+0·80	1·32	20	2	+0·6	8·1	+1·4	3	11	5	6	1	1	1	0	0	8	14	2	2	1	0	0	1	0	Pamban
5·3	+2·0	4·9	3·90	+3·37	2·64	20	3	+2·3	3·0	−0·8	4	5	4	0	0	0	1	3	11	0	8	9	2	0	0	0	0	9	Mathurai
5·1	+1·4	4·6	1 91	+1·08	1·40	20	3	+2·0	8·9	+2·2	0	7	2	3	0	1	0	7	8	0	13	7	8	0	0	0	0	0	Nagapattinam
4·5	+2·2	4·3	3·11	+2·62	1·44	20	4	+3·4	4·3	+0·5	6	11	1	0	0	0	2	3	5	0	3	19	3	0	0	0	1	2	Tiruchi
3·0	0	2·9	1·89	+1·53	1·13	24	3	+2·5	3·9	+1·3	11	13	1	0	1	1	1	0	0	9	10	2	2	1	3	1	0	0	Coimbatore
2·6	+0·9	3·0	1·94	+1·61	1·20	24	3	+2·4	6·1	+1·6	0	0	25	0	1	1	0	0	1	0	1	13	1	0	5	0	0	8	Salem
5·7	...	5·9	2·40	...	2·08	20	2	...	...	...	1	11	0	1	0	0	0	4	11	0	22	0	1	0	1	0	1	3	Kallakurichi
4·6	+1·6	3·1	0·56	−0·34	0·46	23	1	−0·2	5·5	+1·8	6	6	2	1	1	2	2	7	1	0	12	9	7	0	0	0	0	0	Cuddalore
3·3	+0·9	2·8	0·77	+0·52	0·77	20	1	+0·4	4·2	+1·5	0	0	3	1	0	0	0	0	24	0	2	17	7	1	0	0	0	1	Vellore
3·7	+1·5	2·8	0·47	+0·06	0·36	24	1	+0·3	8·0	+1·5	0	0	5	4	1	4	7	7	0	0	3	13	8	3	1	0	0	0	Madras
2·5	...	2·8	1·00	...	0·89	23	2	...	4·5	...	0	0	2	8	9	2	1	1	5	3	6	11	6	1	0	1	0	0	Arogyavaram
																													Malabar And South Kanara
1·6	−0·2	1·8	0	−0·07	0	...	0	−0·1	6·1	+1·0	3	7	15	2	0	0	0	0	1	3	0	0	0	0	0	6	19	0	Mangalore
4·0	+1·9	4·4	1·09	+0·90	0·65	21	2	+1·7	8·7	+2·6	1	11	13	1	0	0	1	1	0	0	1	0	0	0	1	13	13	0	Kozhikode
2·6	...	3·5	1·63	...	1·05	22	3	...	5·3	...	0	1	14	5	0	0	5	0	3	2	1	11	4	1	2	7	0	0	Palghat
																													Mysore
1·6	0	2·5	0·13	+0·02	0·13	22	1	+0·8	4·1	+0·3	0	0	6	4	0	1	9	0	8	0	1	13	2	1	0	3	1	7	Chitaldrug
2·1	−0·1	4·0	0·19	−0·05	0·17	22	1	+0·6	4·1	+1·2	0	0	6	5	1	2	5	1	8	1	2	9	5	1	3	5	2	0	Hassan
2·6	+0·8	2·8	0·08	−0·18	0·06	23	0	−0·4	6·1	+1·4	1	4	9	6	1	0	1	1	5	2	4	7	8	1	1	1	1	3	Bangalore
2·7	+0·5	4·3	0·78	+0·54	0·78	20	1	+0·5	4·6	−0·1	3	3	4	3	3	0	4	1	7	5	6	10	3	0	0	2	1	1	Mysore

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relat humic %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Highest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Travancore-Cochin																					
Fort Cochin ...	10	1012·0	-0·7	1008·0	86·3	-0·7	90	5,6	75·2	-0·3	72	1,5,6	78·9	83·5	73·3	76·2	25·5	+1·0	27·5	75	+2
Alleppey ...	12	1011·7	...	1007·8	89·3	...	91	4 days	74·5	...	70	2,5	80·2	84·8	75·6	77·3	28·2	...	28·6	80	...
Trivandrum ...	211	1004·7	-0·8	1001·4	88·6	...	95	11	73·2	...	68	2	77·0	83·4	72·5	75·3	25·2	+0·6	26·3	79	+1
Nagercoil ...	195	1005·3	...	1001·8	91·9	...	96	18,19	73·7	...	68	8	79·2	84·9	70·6	74·1	21·7	...	23·9	64	...
Hill Stations Excluding Kashmir																					
Aijal ...	3,599	...	...	...	67·3	...	80	22	55·4	...	39	13	60·0	63·6	57·0	59·3	14·2	...	15·3	79	...
Shillong ...	4,921	850·0	-1·3	848·0	62·4	-0·1	72	22	42·5	+0·1	27	13	55·4	54·0	46·6	48·8	7·2	-1·8	9·8	49	-12
Cherrapunji ...	4,309	869·5	-1·0	867·4	60·8	-1·4	67	21	47·5	-1·0	33	13	55·4	54·3	49·5	50·9	9·6	-0·5	11·2	65	+5
Darjiling ...	7,432	774·2	-1·7	772·1	48·8	+1·0	56	21,22	36·3	-0·3	27	13	41·2	41·1	40·1	40·2	8·1	+0·6	8·0	92	+16
Kalimpong ...	3,965	879·1	-2·2	876·1	59·7	-1·6	66	27	47·5	-0·8	40	14,16	50·9	53·1	48·7	50·3	11·0	+0·3	11·1	86	+13
Katmandu ...	4,388	867·8	...	864·9	68·5	+0·3	76	22	38·8	-1·1	31	13	45·8	58·2	43·5	50·0	8·5	-0·3	9·2	83	-2
Muktesar ...	7,592	769·8	-2·2	768·9	50·4	-0·1	60	29,25	35·4	-0·4	21	11	40·6	45·1 (b)	33·6	38·1	4·1	-0·6	5·3	51	-3
Mussooree ...	6,699	795·0	...	794·0	50·5	0	60	8	36·5	-1·2	20	10	42·3	44·1	35·8	39·4	4·7	-1·3	6·5	51	-14
Simla ...	7,224	779·1	-1·5	779·1	46·9	-1·9	62	24	33·0	-3·1	17	10,11	40·0	41·8	32·5	36·3	3·6	-0·7	5·3	46	0
Abu ...	3,945	881·1	-1·1	879·8	66·3	-1·7	74	6	47·3	-5·8	32	11	52·5	62·7	40·3	45·9	3·7	-2·6	3·9	28	-15
Pachmarhi ...	3,528	895·1	-1·3	891·4	75·1	-0·2	82	20	50·0	-0·7	32	12	60·2	71·6	51·1	56·2	9·3	-3·5	9·0	52	0
Mahabaleshwar ...	4,534	863·6	-1·0	862·3	78·0	+0·7	84	8	57·2	-1·0	44	11	61·8	71·5	51·7	58·7	9·0	+0·6	11·7	48	+1
Mercara ...	3,781	886·1	-1·5	883·8	79·3	-1·3	82	6 days	59·6	+0·6	54	3	64·9	75·4	60·1	64·8	15·8	+0·1	16·7	74	0
Kodaikanal ...	7,688	772·2	0	770·7	64·0	-0·1	69	8,9,16	48·3	+0·9	42	2	53·8	57·5	46·3	51·8	8·0	+0·2	11·1	60	+8
Ootacamund ...	7,364	781·0	-0·4	779·3	69·3	+1·8	74	7,8	44·3	+0·4	35	12	52·0	62·2	47·5	55·5	9·6	+1·5	12·6	75	+9
Coonoor ...	5,730	827·8	...	...	68·0	-1·8	73	13	48·8	-0·3	41	6	62·9	...	56·2	...	13·0	+2·1	...	68	+6
Tibet																					
Lhasa ...	12,090	620·3	...	...	52·6	...	62	15,21	23·4	...	12	17	34·5	...	33·4	...	6·2	...	...	91	..
Gyantse ...	13,110	634·9	...	...	49·6	+7·6	60	15	15·5	+4·5	3	4	31·5	...	26·0	...	3·1	0	...	53	-1
Ceylon																					
Colombo ...	24	1011·0	-0·9	1007·5	87·6 (d)	-0·4	96	14	72·2	0	67	5	76·6	83·1	73·3	76·6	26·5	+0·9	28·9	85	(
Trincomalee ...	24	1011·6	-0·7	1008·7	83·6	-1·4	86	4 days	76·5	+1·5	72	11	79·1	80·5	74·8	75·2	27·5	+1·1	27·5	81	(
Hambantota ...	61	1009·2	-1·0	1005·8	86·3	+0·4	89	4 days	72·9	+0·6	68	4,5	77·0	82·3	73·0	76·3	25·9	+1·2	28·1	82	-
Mannar ...	12	1012·3	...	1008·5	86·2	...	89	26,27	74·1	...	70	5	77·1	83·1	73·6	74·8	26·7	...	25·7	84	..

(b) Mean of 29 days

(d) Mean of 27 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																				STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.										
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Travancore-Cochin
6·1	+4·3	5·4	5·06	+4·26	1·32	28	8	+6·8	7·1	+2·3	1	10	10	6	0	1	0	0	0	0	0	1	0	0	3	14	10	0	Fort Cochin
4·8	...	3·4	4·79	...	1·95	28	6	...	6·5	...	0	9	12	5	0	0	0	1	1	0	0	1	0	0	0	14	13	0	Alleppey
3·9	+1·8	4·9	1·36	+0·60	0·44	15	4	+2·7	4·3	+0·9	7	8	3	5	0	0	0	2	3	0	3	0	1	1	14	3	6	0	Trivandrum
4·6	...	5·3	2·78	...	1·75	20	3	...	6·2	...	3	16	3	0	0	1	0	2	3	0	7	3	0	1	2	14	1	0	Nagercoil
																													Hill Stations Excluding Kashmir
1·9	...	2·3	1·07	...	0·55	7	3	...	4·1	...	0	0	3	0	5	12	1	0	7	1	0	0	1	3	11	6	2	4	Aijal
2·2	+0·1	4·4	2·07	+1·01	0·78	10	4	+1·2	3·1	+0·8	0	0	0	0	1	12	3	0	12	0	0	0	0	0	6	2	3	17	Shillong
3·1	+0·6	2·8	4·16	+2·05	2·41	10	5	+1·5	7·3	+2·3	0	7	6	1	0	10	3	0	1	1	1	0	0	0	20	5	0	1	Cherrapunji
5·6	+1·8	5·5	1·06	−0·13	0·65	10	3	+0·4	6·5	+2·4	0	1	13	5	0	2	6	0	1	0	0	2	2	0	6	14	1	3	Darjiling
4·6	+1·8	5·4	0·35	−0·78	0·22	10	2	−1·0	6·0	−0·9	1	0	0	3	0	0	2	9	13	1	0	1	23	1	0	0	1	1	Kalimpong
3·2	−1·1	3·1	0·70	−0·97	0·44	10	2	−3·5	1·1	−0·2	0	1	2	2	0	0	0	0	23	4	0	1	0	1	1	0	4	17	Katmandu
2·5	−0·6	2·1	1·78	−0·75	0·71	9	4	−0·7	8·4	+2·6	0	7	5	3	0	0	8	4	1	0	3	1	1	0	6	14	1	2	Muktesar
3·1	−0·7	4·2	1·76	−1·65	0·87	9	3	−2·2	...	...	7	7	0	3	6	3	0	2	0	4	4	1	6	10	1	1	1	0	Mussooree
2·7	−0·9	3·8	1·56	−1·36	0·59	9	3	−2·7	2·5	−1·2	1	3	0	4	8	0	0	0	12	1	3	1	5	9	5	0	1	3	Simla
0·2	−1·5	0·4	0	−0·23	0	...	0	−0·6	3·7	−0·7	1	1	0	0	1	2	1	3	19	5	3	0	0	1	4	2	8	5	Abu
1·3	−0·4	1·6	1·07	+0·40	0·77	22	2	+0·5	2·8	−0·3	2	2	0	2	5	3	3	5	6	4	2	0	1	2	4	6	6	3	Pachmarhi
0·7	+0·1	0·5	0	−0·10	0	...	0	−0·1	5·7	−0·1	0	7	3	3	0	6	5	4	0	0	1	0	0	2	8	9	8	0	Mahabaleshwar
3·9	+1·0	3·6	2·35	+2·11	1·25	20	3	+2·5	4·9	+1·6	12	13	2	0	1	0	0	0	6	9	10	0	0	0	0	8	1	0	Mercara
3·4	+1·6	4·4	3·31	+1·78	1·08	20	6	+3·6	8·5	+0·7	3	7	3	9	1	0	0	4	1	2	2	0	10	4	0	0	5	5	Kodaikanal
2·9	+1·1	4·4	1·41	+0·90	0·84	20	2	+0·9	1·3	−1·5	2	3	1	0	2	0	0	0	20	2	1	2	1	4	0	0	0	18	Ootacamund
4·0	+1·8	...	5·32	+2·46	3·10	20	4	+1·3	2·8	−0·5	1	1	0	17	9	0	0	0	0	...	...	...	...	...	...	...	...	...	Coonoor
																													Tibet
0·8	...	...	0	...	0	...	0	...	...	...	0	0	0	0	0	0	0	0	28	...	...	...	...	...	...	...	...	...	Lhasa
0·6	−1·4	...	0·01	−0·07	0·01	7	0	−0·2	5·9	+1·0	0	2	3	7	0	2	0	0	14	...	...	...	...	...	...	...	...	...	Gyantse
																													Ceylon
4·0	+0·4	5·5	10·60	+8·42	4·28	23	4	+0·5	...	...	1	10	10	2	0	0	0	1	4	7	1	1	1	0	4	4	10	0	Colombo
5·5	+2·1	5·9	4·03	+1·69	1·63	21	4	+1·1	..	..	4	7	5	2	2	1	0	1	6	6	10	8	2	0	0	0	0	2	Trincomalee
5·7	+2·9	6·2	3·18	+1·59	2·05	24	4	+1·2	...	...	20	2	0	0	0	0	3	3	0	4	11	10	0	2	1	0	0	0	Hambantota
4·6	...	5·2	1·12	...	0·88	20	3	...	...	...	0	11	6	3	4	2	1	0	1	9	11	2	1	1	3	1	0	0	Mannar

TABLE *III*.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 4TH CLASS STATIONS— FEBRUARY 1950

STATION	Maximum temperature, °F				Minimum temperature, °F				Mean dry bulb temperature 0830 hrs. I.S.T. °F	Mean wet bulb temperature 0830 hrs. I.S.T. °F	Vapour pressure millibars		Relative humidity %		Mean cloud amount, 0830 hrs. I.S.T.	Rainfall, inches				Number of rainy days (0,10″or more)		W
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 0830 hrs. I S.T.	Departure from normal	Mean 0830 hrs. I.S.T.	Departure from normal		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Resultant direction 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Assam																						
Lum ling ...	79·1	+2·0	87	22	51·4	+1·1	37	13	67·9	60·5	14·5	−0·5	63	−24	...	15·0	+0·20	0·46	8	4	+1·0	...
Jammu and Kashmir																						
Jammu ...	67·2	−1·4	78	28	44·2	−7·0	35	11,12	50·4	46·3	9·5	−0·1	72	+6	2·9	2·21	-0·22	1·60	9	2	−1·7	...
Kargil (R) ...																						
Mysore																						
Balehonnur ...	84·0	−0·3	87	8,28	59·6	−0·5	56	5 days	65·5	62·4	18·0	+1·0	84	+4	...	0·74	+0·68	0·74	20	1	+0·8	...
Sikkim ...																						
Lachen ...	..	...	...	...	43·4	...	36	28	38·3	...	...	...	...	...	...	1·40	...	0·57	13	3	...	...
Tibet																						
Yatung (Chumbi)	53·9	+8·7	61	4	20·7	−1·0	13	13	26·8	25·4	4·7	+0·3	85	+3	1·5	0·74	−1·41	0·59	7	1	−2·9	...

(R) Register not received

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 5TH CLASS STATIONS— FEBRUARY 1950

Division	Station	Rainfall, inches				Number of rainy days (0,10″ or more)		Division	Station	Rainfall, inches				Numb rainy (0.10″ o
		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal			Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Assam ...	Mawsynram ...	2·35	...	0·90	11	3	...	Jammu & Kashmir	Sonamarg ...	2·85	−6·48	0·90	8	7
West Bengal ...	Bankura ...	0·27	−0·87	0·18	23	1	−1·1		Gurez * ...	...	...	...	...	...
Bihar ...	Muzaffarpur ...	0·75	+0·18	0·30	10	3	+1·3	Deccan (Desh) ...	Khandala ...	0	−0·12	0	...	0
	Chapra ...	0·17	−0·51	0·11	10	1	−0·6	Tamilnad ...	Palayamcottai ...	4·27	+3·10	2·09	20	5
	Arrah ...	0·13	−0·70	0·13	10	1	−0·6	Sikkim ...	Thangu ...	0·19	...	0·03	3,6,28	0
Punjab (I) ...	Dalhousie ...	3·83	−2·82	2·78	9	6	−2·5		Lachung ...	0·70	−1·99	0·43	28	1
	Kyelang ...	2·02	−0·52	0·75	7	4	−1·8		Chungthang ...	2·17	...	0·37	21	10
	Gondla ...	7·97	...	2·13	8	11	...							
	Koksar ...	3·12	...	0·40	6	14	...							
	Kothi ...	3·32	...	0·80	9	6	...							
	Dharampore ...	2·78	−0·51	1·70	9	3	−2·5							
	Kharsali ...	4·00	...	1·50	10	4	...							
	Rana ...	1·30	...	0·60	3,10	3	...							
	Jamuna Chetty ...	2·51	...	1·20	9	4	...							

(*) Data not reliable.

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Note :— Data upto 9·0 Km. a.s.l. are given under Table A and data above 9·0 Km. under Table B.

In tables A & B

n represents the number of observations,

V represents the mean wind speed in m/second irrespective of direction,

v represents the resultant mean velocity in m/second.

D represents the direction of resultant mean wind in degrees East of North.

For the co-ordinates of the stations for which data have been published in these Tables and other particulars please refere to the Monthly Report January 1950 and subsequent issues.

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

FEBRUARY 1950

STATION	AHMEDABAD												ALLAHABAD									
Time in I.S.T.	0230				0730				1430				0230				0730				1430	
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	28	1·9	1·3	337	28	1·5	0·8	30	28	2·6	1·2	338	28	1·4	0·3	286	28	1·2	0·6	227	28	2·9	1·7
0·15 a.g. ...	28	9·8	6·8	2	28	9·0	6·5	36	28	4·4	1·8	345	28	6·9	3·4	338	28	6·5	1·3	354	28	5·5	3·6
0·6 a.s.l. ...	28	7·5	4·1	357	28	9·4	5·8	46	28	3·9	1·4	344	28	7·4	3·4	320	28	7·7	3·6	333	28	5·3	3·0
1·0 ,, ...	27	5·3	1·8	345	27	6·9	3·0	41	28	4·9	1·6	303	28	7·4	4·2	286	28	7·9	4·1	306	28	5·5	4·0
1·5 ,, ...	27	5·9	1·8	266	26	6·6	1·2	304	26	5·3	1·8	289	27	8·3	5·9	267	26	8·2	6·3	276	26	8·4	7·3
2·0 ,, ...	27	6·9	4·5	244	25	6·1	4·7	254	25	7·0	4·7	278	25	11·1	9·5	267	25	11·4	10·0	269	26	11·1	10·1
2·5 ,, ...	26	8·8	7·0	260	24	8·4	7·3	255	24	8·8	6·1	276	24	12·9	11·7	269	25	13·2	12·0	268	26	13·6	12·8
3·0 ,, ...	23	9·3	6·5	268	24	10·8	9·4	263	25	11·3	9·5	268	23	14·4	13·2	270	23	14·4	13·6	268	25	15 8	15·3
4·0 ,, ...	9	13·2	12·7	253	23	14·7	13·3	260	24	15·7	14·4	264	5	12·3	11·3	284	17	16·6	15·8	274	23	19·7	18·8
5·0 ,, ...	3	17·0	16·3	250	20	20·4	19·0	263	22	21·4	19·5	265	1	20·5	20·5	265	9	17·3	16·9	276	16	25·6	24·6
6·0 ,, ...					19	24·4	22·6	268	22	24·4	22·7	264					4	20·0	18·7	269	13	32·0	29·2
7·5 ,, ...					4	24·7	24·3	277	14	32·7	30·6	267					2	20·7	20·7	304	6	35·4	30·1
9·0 ,, ...					2	23·7	23·6	265	7	36·4	35·6	271									2	52·5	47·0

STATION	AMBALA												ANANTAPUR								ASANSOL		
Time in I.S.T.	0230				0730				1430				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	28	2·4	1·6	318	28	2·2	1·6	317	28	2·9	2·1	300	28	2·0	0·6	185	28	2·5	1·4	63	27	1·7	1·3
0·15 a.g. ...	27	8·8	8·0	327	28	8·3	6·5	326	28	6·6	4·9	302	28	4·6	1·6	158	28	3·8	2·4	70	27	4·8	3·3
0·6 a.s.l. ...	27	8·6	7·7	325	28	9·6	7·7	327	28	6·5	4·8	308	28	5·1	2·0	141	28	3·5	1·8	76	27	6·0	4·4
1·0 ,, ...	27	7·1	5·6	317	26	7·7	6·3	326	27	5·8	3·1	322	27	6·4	3·7	137	27	3·4	1·6	100	25	7·0	6·3
1·5 ,, ...	26	5·8	2·7	321	26	6·8	3·9	312	25	5·5	2·8	321	27	5·1	2·8	136	27	3·4	1·6	120	25	9·0	8·4
2·0 ,, ...	24	5·8	1·9	288	24	6·2	2·5	302	25	5·2	0·8	275	27	4·1	0·3	124	27	3·8	1·2	138	14	9·7	9·2
2·5 ,, ...	24	6·5	2·3	254	24	6·0	1·3	254	25	6·3	0·9	219	28	4·5	0·5	233	28	4·7	1·4	174	8	10·3	9·5
3·0 ,, ...	23	7·0	3·1	249	24	6·7	1·9	247	25	6·1	2·5	254	28	5·3	0·4	126	28	5·1	1·3	205	7	11·0	10·9
4·0 ,, ...	3	6·7	4·0	288	23	8·3	5·4	256	23	9·6	6·7	264	27	5·5	0·3	210	28	5·4	1·4	220	3	18·8	17·7
5·0 ,, ...	1	4·0	4·0	250	21	11·6	9·0	259	21	13·7	12·0	266	26	5·7	0·3	282	26	6·3	1·6	284			
6·0 ,, ...	1	13·0	13·0	235	18	16·9	15·1	261	18	19·3	17·3	267	26	7·1	2·1	325	23	6·0	1·5	304			
7·5 ,, ...					6	20·7	20·1	255	11	24·5	23·1	260	24	7·6	2·6	308	24	7·7	3·7	336			
9·0 ,, ...					1	34·0	34·0	240	2	16·0	15·9	242	20	7·2	4·1	287	21	8·5	4·4	297			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

FABRUARY 1950

STATION	ASANSOL								BANGALORE												BAREILLY			
Time in I.S.T.	0730				1430				0230				0730				1430				0730			
Heighti in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	28	1·6	1·1	310	28	1·8	1·5	303	28	3·5	2·9	111	28	2·8	1·7	107	28	3·0	1·8	96	28	1·7	0·9	298
0·15 a.g. ...	28	4·6	2·2	334	28	3·5	2·6	298	26	7·7	6·6	117	28	6·9	4·8	120	28	4·1	3·3	102	28	8·4	6·3	326
0·6 a.s.l. ...	27	5·9	4·1	314	28	3·7	3·0	292	...	...	..	...	...	...	...	...	...	...	...	...	28	9·4	7·4	317
1·0 ,, ...	27	6·4	5·2	290	28	4·5	4·0	290	26	5·9	5·0	116	28	4·9	3·0	119	28	3·5	1·8	98	27	8·6	6·7	309
1·5 ,, ...	26	9·0	8·7	283	28	7·5	7·0	290	23	6·9	4·3	116	26	6·0	3·6	128	28	3·8	2·1	94	25	7·6	4·9	298
2·0 ,, ...	23	11·0	10·6	289	28	11·4	10·8	291	21	4·3	2·1	81	25	4·0	2·0	81	26	3·2	1·5	95	24	8·6	7·0	273
2·5 ,, ...	18	10·2	9·6	291	28	13·9	13·4	288	20	4·1	0·6	43	25	4·9	2·2	40	21	3·5	1·7	100	24	9·4	7·4	274
3·0 ,, ...	16	12·1	11·5	297	26	15·8	14·4	289	16	4·9	1·9	87	24	5·3	1·2	79	19	4·3	1·3	95	20	9·2	6·9	270
4·0 ,, ...	11	18·4	17·7	287	17	18·9	18·3	287					22	4·9	2·6	67	20	4·7	1·9	78	15	11·1	9·2	264
5·0 ,, ...	2	24·3	16·5	282	7	22·1	21·6	285					21	5·3	2·9	65	16	6·2	3·3	61	9	15·4	11·1	264
6·0 ,, ...					2	23·3	20·7	279					19	7·4	4·6	61	16	6·0	3·0	52	4	18·2	11·9	284
7·5 ,, ...					1	24·5	24·5	310					15	7·4	4·0	33	13	6·4	1·3	44	3	17·2	16·5	257
9·0 ,, ...													14	7·6	2·6	13	10	7·1	2·5	259	...	...	...	...

STATION	BAREILLY				BHOPAL												BHUJ							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Heighti in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	28	2·9	1·9	305	28	2·2	1·2	30	28	2·2	0·8	11	27	2·5	1·7	271	28	0·8	0·3	337	28	0·5	0·2	288
0·15 a.g. ...	28	5·3	4·2	301	28	8·8	4·4	29	28	7·1	3·0	54	26	3·8	2·2	269	28	7·8	6·0	352	28	6·0	3·8	10
0·6 a.s.l. ...	28	5·7	4·6	299	28	8·1	4·3	31	28	5·9	2·4	53	26	3·7	2·3	264	28	8·9	6·5	358	28	9·8	6·5	19
1·0 ,, ...	28	6·8	5·7	299	27	7·7	3·3	24	28	7·0	1·7	10	26	4·0	2·7	260	28	6·5	3·3	5	28	8·0	4·3	10
1·5 ,, ...	25	7·2	6·0	297	27	7·1	2·9	256	26	6·5	3·1	268	26	5·5	4·1	260	27	5·8	1·2	322	27	6·6	3·1	336
2·0 ,, ...	24	7·1	5·5	283	26	8·6	5·2	254	26	8·6	7·0	257	25	8·4	7·0	256	26	5·6	2·9	271	27	6·1	4·2	275
2·5 ,, ...	24	8·9	7·0	279	23	11·6	8·2	258	23	11·3	9·4	253	24	12·2	9·9	249	26	7·1	5·5	271	27	7·8	6·3	269
3·0 ,, ...	24	10·7	9·2	272	19	14·8	11·9	257	22	12·9	10·8	258	24	14·8	13·6	256	25	9·6	8·0	272	26	9·4	7·7	272
4·0 ,, ...	20	13·6	11·8	275	5	28·3	20·1	193	15	17·5	15·7	265	18	18·3	17·2	270	13	14·3	13·0	262	24	14·4	13·3	274
5·0 ,, ...	18	17·7	16·5	266					8	19·7	18·6	271	10	20·3	19·9	280	3	20·7	20·3	251	23	20·9	19·9	268
6·0 ,, ...	13	22·9	21·4	267					2	20·7	20·1	273	6	24·1	23·5	279	1	22·5	22·5	275	20	25·0	23·0	269
7·5 ,, ...	4	28·0	24·2	271									3	30·5	30·4	280					9	26·4	25·3	277
9·0 ,, ...													3	39·8	39·2	287					6	33·7	32·1	272

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level .

FEBRUARY 1950

STATION	BHUJ				BIKANER								BOMBAY										
Time in I.S.T.	1430				0730				1430				0230				0730				1430		
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	28	2·9	1·4	13	28	1·5	0·4	159	28	1·9	1·1	313	28	0·8	0·5	13	28	1·5	0·9	56	28	6·2	5·5
0·15 a. g. ...	28	4·9	2·5	2	28	6·7	3·3	71	26	3·4	2·1	308	28	4·6	2·8	345	28	4·5	3·0	23	28	5·6	4·8
0·6 a.s.l. ...	28	5·1	2·7	356	27	6·7	3·2	31	25	3·5	2·3	325	28	4·3	2·9	346	28	4·5	3·2	357	27	3·7	2·1
1·0 ,, ...	28	5·2	2·5	350	27	6·0	2·8	343	26	3·6	2·2	315	28	4·3	1·8	307	27	4·5	2·8	352	27	4·3	0·6
1·5 ,, ...	28	5·2	2·1	331	27	6·8	3·9	315	26	3·9	2·3	299	28	5·7	3·2	231	27	6·1	3·5	218	27	5·3	3·2
2·0 ,, ...	27	6·7	4·4	292	27	8·3	5·9	295	26	5·8	4·0	281	25	7·3	4·4	207	26	7·6	5·5	204	27	7·3	6·2
2·5 ,, ...	26	8·1	6·5	274	26	8·5	6·3	282	26	8·3	5·9	276	21	6·9	5·1	223	26	7·6	6·1	220	26	7·7	6·2
3·0 ,, ...	26	9·9	8·5	267	25	9·0	7·1	278	26	10·7	8·4	277	20	6·1	5·2	250	26	7·6	6·8	244	26	7·7	6·4
4·0 ,, ...	24	16·0	14·7	266	20	12·8	10·7	266	25	15·6	13·5	275	6	10·3	8·3	260	24	11·8	10·2	257	26	11·7	9·9
5·0 ,, ...	22	22·0	20·7	264	13	13·6	12·0	264	18	18·5	16·1	265					20	13·6	12·1	273	25	13·5	11·8
6·0 ,, ...	18	24·5	22·0	268	9	15·9	13·9	267	11	23·4	21·9	257					14	14·0	12·8	283	18	14·6	12·6
7·5 ,, ...	12	28·3	26·8	271	3	14·3	13·7	273	5	28·7	27·6	257					3	17·0	16·3	287	11	16·2	15·4
9·0 ,, ...	6	30·5	30·0	277					1	20·0	20·0	240									4	20·6	18·9

STATION	CALCUTTA												COCHIN (Willingdon Island)										
Time in I.S.T.	0230				0730				1430				0230				0730				1430		
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	28	1·7	0·6	269	28	1·8	0·3	285	28	2·7	1·7	274	28	1·2	0·8	43	28	1·2	1·1	59	28	4·2	3·3
0·15 a. g. ...	28	5·1	2·7	256	28	5·1	1·2	307	28	4·3	2·4	271	26	3·2	1·7	16	27	3·1	2·5	45	27	4·0	3·4
0·6 a.s.l. ...	28	6·6	3·6	276	28	6·0	2·8	285	28	4·1	3·2	292	26	3·3	2·2	336	27	3·6	2·4	350	26	3·2	2·2
1·0 ,, ...	27	6·7	4·7	282	25	5·7	3·5	281	28	5·1	4·5	291	26	3·3	1·0	55	27	3·3	1·0	4	26	3·5	2·1
1·5 ,, ...	27	8·0	7·0	291	25	7·4	6·8	84	27	7·0	6·4	290	21	4·5	3·1	76	25	3·9	2·3	84	27	4·5	3·5
2·0 ,, ...	27	10·4	9·5	285	25	9·5	8·7	288	26	9·7	9·0	294	18	5·4	4·8	72	23	5·0	3·9	83	26	4·4	3·4
2·5 ,, ...	19	11·0	10·2	285	21	10·0	9·1	295	23	11·1	10·9	297	16	6·0	4·8	86	22	5·5	3·5	93	26	5·6	3·8
3·0 ,, ...	15	11·7	10·6	286	18	11·1	10·4	290	23	13·3	12·9	298	14	6·0	3·9	94	22	5·8	4·0	108	25	5·0	3·2
4·0 ,, ...	1	10·5	10·5	265	7	12·9	12·7	277	17	17·8	17·2	286	5	5·6	3·9	142	16	5·6	4·6	92	24	5·4	4·1
5·0 ,, ...					1	18·5	18·5	270	9	22·4	22·1	278					14	6·9	6·3	87	21	7·2	5·1
6·0 ,, ...									5	22·0	21·2	267					11	8·8	7·1	76	17	7·1	5·3
7·5 ,, ...									1	24·0	24·0	275					2	8·7	8·3	49	10	7·7	5·9
9·0 ,, ...																	1	3·5	3·5	330	6	5·5	1·2

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

FEBRUARY 1950

STATION	COOCH BEHAR								CUTTACK												DEOLALI			
Time in I.S.T.	0730				1430				0230				0730				1430				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	28	1·6	1·0	82	28	1·4	1·0	211	28	0·2	0·1	265	28	0·7	0·4	286	28	1·1	0·4	304	22	0·5	0·1	270
0·15 a.g. ...	28	5·7	3·5	87	28	3·2	2·1	220	28	4·9	3·2	242	28	4·8	2·4	266	28	3·3	1·3	284	22	3·4	0·8	245
0·6 a.s.l. ...	28	5·1	2·4	97	28	3·5	2·3	222	28	6·2	4·0	241	28	5·0	2·6	248	28	3·5	1·8	283	22	2·2	0·6	229
1·0 ,, ...	28	3·8	0·8	138	27	3·5	2·8	235	28	5·2	3·6	265	28	4·8	2·6	267	28	3·8	2·3	275	22	5·3	0·3	230
1·5 ,, ...	26	3·6	0·8	225	27	5·0	3·8	254	28	6·1	4·4	291	27	6·3	4·1	296	28	5·4	4·7	283	22	7·1	2·6	228
2·0 ,, ...	25	5·9	4·1	272	27	7·8	6·5	272	28	7·8	6·0	294	26	7·1	5·6	306	28	6·9	6·1	292	22	8·5	6·2	217
2·5 ,, ...	23	10·3	9·1	277	27	12·9	12·3	280	19	7·1	6·5	296	25	7·8	7·0	295	27	8·8	8·3	284	21	9·8	7·7	226
3·0 ,, ...	21	16·4	16·0	276	20	16·6	16·1	279	18	11·0	10·3	280	28	9·9	8·9	282	25	11·4	10·6	286	21	9·8	7·7	242
4·0 ,, ...	11	21·4	20·8	275	7	16·3	16·2	273	6	14·3	13·9	277	19	13·7	12·8	277	23	15·3	14·1	280	18	12·4	10·8	268
5·0 ,, ...	6	13·8	13·2	277	5	25·3	25·2	283					16	17·3	16·0	278	20	18·0	16·7	278	17	14·5	13·5	272
6·0 ,, ...	3	24·2	24·0	261	1	24·0	24·0	280					14	19·1	17·6	272	19	21·9	20·7	274	14	16·0	14·7	288
7·5 ,, ...													5	26·9	22·8	276	13	24·0	22·9	268	8	17·7	16·2	284
9·0 ,, ...																	8	25·8	24·2	263	6	21·1	20·7	276

STATION	DIBRUGARH								GADAG												GAYA			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	28	1·7	1·2	74	28	2·8	1·6	35	28	3·3	1·7	260	28	2·5	0·5	184	28	2·4	0·5	157	28	2·6	0·9	205
0·15 a.g. ...	24	3·1	2·3	62	27	3·3	2·1	44	28	6·5	1·8	286	28	5·8	0·9	71	28	3·7	1·2	151	28	5·4	2·6	282
0·6 a.s.l. ...	23	3·5	2·4	58	27	2·9	1·9	79	...	...	...	...	...	...	...	...	...	..	...	...	28	6·7	4·6	295
1·0 ,, ...	23	3·6	1·3	70	24	2·6	1·4	90	28	6·2	0·8	299	28	5·9	1·6	129	28	3·5	0·9	176	27	6·8	5·8	284
1·5 ,, ...	21	3·7	1·4	184	23	2·9	0·9	185	28	4·7	2·0	145	28	4·1	1·7	166	28	3·4	1·6	189	26	9·3	8·3	272
2·0 ,, ...	18	3·0	1·4	222	21	4·1	3·2	223	28	4·1	2·7	148	28	4·3	1·7	177	28	3·7	1·6	194	23	10·8	9·6	279
2·5 ,, ...	17	3·9	1·8	225	20	5·7	5·0	222	28	4·1	1·9	193	27	4·3	1·7	204	28	4·4	2·0	231	13	9·8	7·8	283
3·0 ,, ...	13	5·0	3·0	238	19	6·8	6·2	225	28	4·5	2·0	238	27	5·4	1·9	249	27	4·7	1·8	246	10	12·1	9·7	284
4·0 ,, ...	6	11·3	9·3	217	13	7·6	5·8	240	16	5·6	2·6	265	27	5·6	2·3	245	27	5·4	1·5	277				
5·0 ,, ...	1	7·5	7·5	285	6	12·6	12·0	262	9	5·4	2·6	258	25	6·6	2·6	271	23	5·4	1·6	290				
6·0 ,, ...	1	13·5	13·5	280	2	17·3	17·2	278	7	7·7	3·7	263	25	7·6	3·4	286	22	7·4	2·6	312				
7·5 ,, ...					1	35·5	35·5	305					19	8·9	5·8	286	22	8·6	5·4	309				
9·0 ,, ...													12	8·8	7·7	266	19	9·5	8·0	291				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

FEBRUARY 1950

STATION	GAYA								GOPALPUR								GORAKHPUR							
Time in I.S.T.	0730				1430				0730				1430				0730				1430			
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	28	2·5	1·0	201	28	3·9	3·1	296	28	3·4	2·2	319	28	5·0	3·8	164	28	2·0	1·5	270	28	2·7	2·2	2
0·15 a.g. ...	28	4·8	2·2	246	28	5·1	4·2	302	27	4·8	2·0	273	28	6·3	4·5	171	28	5·4	4·0	293	28	4·4	3·3	2
0·6 a.s.l. ...	28	6·5	4·4	304	28	4·7	4·0	297	27	5·3	2·6	233	28	3·5	1·3	182	28	7·0	5·9	297	28	5·0	4·1	2
1·0 ,, ...	28	7·4	6·1	289	28	5·6	5·2	282	27	4·7	1·8	254	28	4·2	1·4	307	27	7·0	6·0	294	27	6·5	5·7	2
1·5 ,, ...	26	9·5	8·9	281	27	9·2	8·8	284	27	5·5	3·6	317	28	5·8	4·7	299	25	8·8	7·9	290	25	8·7	8·2	2
2·0 ,, ...	25	11·3	10·7	280	27	12·0	11·4	280	26	6·6	4·8	317	27	7·8	6·8	295	24	10·1	9·4	286	25	11·3	10·6	2
2·5 ,, ...	25	12·6	12·0	278	27	14·0	13·5	280	23	6·7	5·5	300	27	8·2	7·0	290	22	11·4	10·7	279	25	13·3	12·6	2
3·0 ,, ...	21	12·8	12·1	278	26	15·3	14·9	279	23	8·4	7·2	285	26	9·6	8·1	284	17	13·3	12·7	280	24	14·7	14·0	2
4·0 ,, ...	9	16·8	16·2	279	23	18·0	17·3	279	19	9·7	8·5	276	26	13·0	11·3	279	9	12·5	12·2	282	15	16·2	15·1	2
5·0 ,, ...	1	24·0	24·0	265	14	24·8	24·1	275	14	12·3	10·7	261	22	13·8	12·5	273	2	14·0	13·9	287	9	14·1	12·3	2
6·0 ,, ...					7	28·8	27·1	274	10	13·6	12·2	263	17	14·5	13·4	275	1	17·0	17·0	290	9	21·3	19·9	2
7·5 ,, ...									6	15·1	14·9	253	11	17·0	15·7	273					6	30·8	25·6	2
9·0 ,, ...									4	15·7	15·4	254	5	21·3	19·2	263								

STATION	HYDERABAD												JAGDALPUR											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Heiget in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	28	1·6	1·0	114	28	1·5	0·5	117	28	2·4	1·3	114	28	0·5	0·2	200	28	0·3	0·1	273	28	2·3	1·7	
0·15 a.g. ...	28	7·7	5·3	126	28	6·4	3·0	127	28	3·8	1·1	100	26	5·1	1·5	241	27	4·0	1·8	186	28	3·7	2·6	
0·6 a.s.l. ...	28	4·8	3·2	118	28	3·6	1·3	130	28	3·4	1·4	111	26	4·0	1·3	237	27	2·5	1·2	186	28	3·2	2·3	
1·0 ,, ...	28	8·9	6·2	131	28	7·2	4·2	142	28	3·3	0·9	124	26	4·9	1·5	260	27	4·7	1·1	223	28	3·7	2·6	
1·5 ,, ...	28	4·8	2·3	168	28	5·2	2·1	176	28	3·8	1·1	172	26	4·7	3·1	272	27	4·9	2·3	287	28	4·1	2·8	
2·0 ,, ...	28	5·8	4·6	269	28	5·6	3·6	276	28	4·7	3·0	235	26	5·3	4·1	285	27	6·9	5·3	290	28	4·7	3·7	
2·5 ,, ...	27	7·0	5·7	282	27	6·1	4·0	277	27	5·4	3·4	244	24	6·6	5·7	289	27	8·1	6·5	290	28	6·2	5·1	
3·0 ,, ...	27	6·9	4·7	273	27	6·6	4·3	261	25	6·6	4·9	261	22	9·0	7·4	278	27	8·7	7·3	283	28	8·0	6·5	
4·0 ,, ...	2	5·5	5·4	238	27	8·5	5·9	269	22	7·8	5·8	277	14	10·2	8·7	260	25	10·6	8·8	268	26	12·2	10·8	
5·0 ,, ...					26	9·5	7·7	263	21	9·5	7·5	271	9	11·0	8·2	271	18	11·6	10·4	274	23	13·9	12·4	
6·0 ,, ...					25	12·3	8·2	268	21	10·3	8·1	289	4	13·6	13·5	257	15	13·1	11·9	271	24	16·5	14·4	
7·5 ,, ...					13	13·1	10·5	283	19	14·0	10·4	283					10	16·1	14·9	267	22	20·3	17·7	
9·0 ,, ...									13	16·0	14·5	283					3	23·5	22·3	264	14	19·4	18·1	

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

FEBRUARY 1950

STATION	JAMSHEDPUR								JHARSUGUDA												JODHPUR			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	28	2·0	1·8	296	28	2·5	1·9	280	28	1·2	0·7	23	28	1·1	0·8	16	28	1·2	0·9	259	28	4·3	3·6	26
0·15 a. g. ...	28	3·3	2·7	290	28	3·4	2·2	274	28	5·2	1·2	23	27	4·3	2·8	35	28	3·1	2·0	256	28	8·8	6·7	33
0·6 a.s.l. ...	28	4·9	2·6	299	28	3·3	2·4	269	28	6·4	2·0	280	27	5·1	1·7	310	28	3·3	2·2	265	28	8·2	4·9	32
1·0 ,, ...	27	6·1	4·4	280	28	3·8	3·0	273	28	6·3	3·8	272	27	5·5	3·3	264	28	4·0	2·9	264	27	5·8	1·8	357
1·5 ,, ...	27	8·2	7·4	278	28	5·9	5·0	286	28	7·1	5·1	281	27	7·0	5·3	274	27	5·6	4·4	284	27	5·0	2·5	260
2·0 ,, ...	26	9·7	9·0	288	28	9·1	8·2	285	26	7·9	7·2	284	26	8·5	7·4	287	26	7·8	7·0	288	26	5·9	3·9	270
2·5 ,, ...	24	10·6	10·0	286	28	11·2	10·6	283	19	8·7	7·7	283	26	9·1	8·1	287	26	9·5	9·0	286	25	7·7	5·6	274
3·0 ,, ...	23	11·4	10·6	293	28	12·7	12·0	286	17	10·7	9·5	282	26	11·1	10·1	288	26	11·9	11·4	283	25	9·6	8·0	275
4·0 ,, ...	17	14·3	13·7	280	26	18·8	18·2	280	3	9·3	9·3	260	15	14·7	13·4	275	25	17·0	16·2	273	11	13·0	11·5	273
5·0 ,, ...	12	18·4	17·4	276	22	23·7	23·2	275					9	17·2	15·5	267	20	20·7	19·7	270	3	18·5	17·0	258
6·0 ,, ...	5	22·2	22·0	248	16	24·0	23·4	272					3	19·8	19·2	259	12	22·0	20·5	269				
7·5 ,, ...					1	15·5	15·5	265									3	26·0	25·9	244				
9·0 ,, ...																								

STATION	JODHPUR								JABALPUR												MADHOSAGAR			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	28	3·5	2·7	42	28	3·8	0·7	335	28	0·7	0·3	120	28	0·9	0·3	115	28	2·3	1·0	255	14	0·9	0·4	356
0·15 a. g. ...	28	7·2	5·0	54	28	4·8	1·3	333	28	4·5	1·4	111	28	4·5	0·9	159	28	4·6	2·8	257	14	7·3	5·2	42
0·6 a.s.l. ...	28	6·8	3·5	46	28	4·7	1·3	334	28	4·8	1·2	116	28	5·1	0·5	180	28	4·7	2·8	258	14	7·1	5·1	42
1·0 ,, ...	26	5·3	2·7	11	28	4·8	1·1	308	28	5·8	1·7	259	28	7·2	1·7	257	28	4·9	3·2	261	14	6·3	3·0	44
1·5 ,, ...	26	5·0	2·4	329	26	4·6	1·9	304	28	7·7	4·8	264	27	7·9	5·3	255	28	7·2	5·6	261	14	4·5	2·5	264
2·0 ,, ...	26	6·1	3·3	275	26	5·7	3·4	274	26	9·9	8·4	259	27	10·1	7·6	261	28	10·2	8·8	261	14	6·8	6·1	258
2·5 ,, ...	26	7·4	5·7	271	26	8·0	6·0	271	22	10·8	9·6	260	26	12·1	10·3	266	27	11·8	10·7	261	13	8·2	7·1	260
3·0 ,, ...	25	9·9	8·6	269	26	10·6	8·8	271	16	12·9	11·8	270	25	13·5	12·2	273	25	13·9	12·7	266	12	10·6	9·3	266
4·0 ,, ...	22	15·3	13·9	266	25	15·4	14·0	265					12	18·2	16·9	284	22	18·6	17·2	277	3	9·2	8·1	262
5·0 ,, ...	18	18·8	17·9	272	24	20·5	19·6	266					5	20·5	19·5	285	16	24·7	22·7	280				
6·0 ,, ...	13	19·7	19·2	269	21	24·5	24·0	259					1	22·0	22·0	305	8	23·3	22·3	274				
7·5 ,, ...	6	23·3	22·6	271	15	31·5	30·1	264									4	27·5	26·7	279				
9·0 ,, ...	1	24·0	24·0	260	5	28·6	27·4	278									1	33·0	33·0	280				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

FEBRUARY 1950

STATION	MADHOSAGAR								MADRAS												MALEGAON		
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	28	0·8	0·5	281	28	3·2	1·7	317	28	1·4	0·2	280	28	2·1	1·2	273	28	4·3	3·6	101	28	2·3	2·1
0·15 a.g. ...	28	5·0	2·4	354	28	4·4	2·1	327	28	4·2	2·7	119	28	3·9	0·8	144	28	4·4	3·7	105	28	5·6	3·4
0·6 a.s.l. ...	28	7·8	4·2	6	28	4·4	2·1	318	28	4·9	3·4	114	28	4·9	3·0	128	28	4·2	2·6	93	28	5·6	3·4
1·0 ,, ...	27	7·0	2·9	341	28	4·4	2·3	313	27	5·2	3·6	86	28	5·3	3·4	95	28	4·7	2·8	70	28	6·7	2·9
1·5 ,, ...	26	6·8	3·4	294	28	5·7	3·8	285	27	5·1	3·4	55	28	5·3	3·0	66	28	5·2	2·9	46	28	6·7	3·6
2·0 ,, ...	26	8·7	6·7	274	27	7·9	6·2	263	26	5·6	2·7	32	27	5·4	2·7	36	27	5·4	1·9	20	27	8·1	4·8
2·5 ,, ...	26	10·2	8·3	275	27	10·4	9·2	262	25	5·1	0·8	25	27	5·1	1·5	21	27	4·6	1·0	42	26	9·7	6·9
3·0 ,, ...	26	13·2	11·6	268	27	14·3	12·8	261	24	5·7	0·7	123	27	5·1	1·3	91	27	4·5	1·2	72	26	11·5	8·8
4·0 ,, ...	23	18·5	16·5	265	25	20·7	18·7	266	18	5·4	1·7	97	26	5·7	2·7	82	27	5·5	2·0	63	18	11·5	10·4
5·0 ,, ...	17	20·9	18·9	271	24	24·9	23·3	268					24	5·9	3·1	86	25	5·9	2·9	62			
6·0 ,, ...	13	28·7	25·6	273	21	31·4	30·3	268					23	7·8	3·8	68	25	6·5	3·0	74			
7·5 ,, ...	9	33·3	29·3	277	13	32·7	31·6	267					17	7·1	2·8	10	20	6·4	2·2	37			
9·0 ,, ...	3	33·3	32·6	275	8	41·6	38·8	271					13	8·2	4·6	295	16	7·6	2·4	292			

STATION	MALEGAON								MANGALORE												MASULIPAT		
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	28	2·5	2·3	290	28	2·2	1·6	270	28	3·0	2·7	29	28	2·6	2·1	58	28	4·3	3·8	291	28	1·8	0·8
0·15 a.g. ...	28	3·9	1·9	336	28	3·3	1·4	272	28	6·1	5·8	358	28	4·9	3·9	22	28	5·8	5·4	289	28	5·0	3·3
0·6 a.s.l. ...	28	3·9	1·9	336	28	3·3	1·4	272	28	5·9	5·5	338	28	5·0	3·9	352	28	3·6	2·4	301	28	5·8	4·0
1·0 ,, ...	28	5·7	1·7	20	28	3·4	1·7	254	28	4·7	3·3	332	28	4·7	2·8	355	28	3·0	1·0	40	27	5·1	2·4
1·5 ,, ...	28	5·9	1·7	236	27	4·5	2·5	239	27	3·9	0·9	30	27	4·8	0·6	99	28	4·1	2·5	94	26	5·1	1·3
2·0 ,, ...	23	8·2	5·9	223	27	6·1	4·8	235	26	4·9	2·7	98	27	4·1	2·4	125	27	4·3	3·3	92	26	6·0	2·6
2·5 ,, ...	27	10·2	8·6	231	27	8·4	7·2	240	26	5·6	4·8	103	27	4·6	3·2	122	27	4·0	1·6	96	20	5·0	2·1
3·0 ,, ...	27	11·5	9·6	247	27	10·6	9·4	257	21	5·6	4·1	106	27	5·1	1·5	142	27	4·7	1·1	134	17	4·8	1·1
4·0 ,, ...	23	14·0	13·0	261	26	14·5	13·3	260	8	5·3	2·2	139	26	5·4	0·9	93	27	5·0	2·1	114	9	6·4	2·1
5·0 ,, ...	18	16·5	15·2	270	24	17·6	16·4	265	2	10·3	8·1	55	25	5·4	2·5	88	27	5·3	2·4	78			
6·0 ,, ...	13	15·8	15·0	281	19	18·7	16·8	275					24	6·5	3·8	95	26	6·3	3·0	58			
7·5 ,, ...	7	18·8	18·1	280	14	21·5	19·2	278					18	9·7	4·4	30	19	8·3	4·0	14			
9·0 , ...	3	22·3	22·3	290	8	20·3	19·2	281					15	9·1	1·5	29	11	7·5	1·1	342			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

FEBRUARY 1950

STATION	MASULIPATAM								MINICOY												NAGERCOIL			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	28	1·1	0·4	35	28	3·3	2·9	133	28	3·0	2·5	353	28	2·8	2·1	5	28	3·7	3·1	9	28	2·6	1·6	25
0·15 a.g. ...	28	4·5	1·5	142	28	4·5	3·8	135	28	4·8	3·9	1	28	5·1	3·8	12	28	5·5	4·7	11	28	5·2	3·5	36
0·6 a.s.l. ...	28	5·1	3·7	148	28	3·9	2·2	140	28	4·9	3·1	15	28	5·1	3·7	20	28	5·5	4·4	15	28	5·0	3·9	39
1·0 ,, ...	27	5·3	3·2	144	28	3·9	0·7	112	27	5·2	3·0	64	28	4·6	2·9	42	27	5·0	3·6	36	28	6·0	5·3	54
1·5 ,, ...	25	4·9	1·3	43	28	4·7	1·6	353	25	6·3	4·9	94	26	5·6	4·6	95	23	5·0	3·3	96	28	7·4	6·7	62
2·0 ,, ...	24	6·0	2·3	333	28	5·9	2·7	331	24	5·5	4·9	91	23	5·7	5·2	96	23	5·3	3·9	103	28	7·3	6·1	70
2·5 ,, ...	21	5·4	1·5	304	27	5·3	2·6	294	21	5·1	3·6	89	21	5·4	4·1	95	23	5·4	3·8	98	26	6·2	5·0	75
3·0 ,, ...	20	5·0	1·7	284	27	5·4	3·4	281	20	4·6	2·7	88	17	5·1	3·0	77	21	5·0	3·6	76	24	5·9	4·6	76
4·0 ,, ...	19	6·1	2·3	276	26	6·0	3·0	274	10	3·7	2·5	96	12	6·0	5·1	82	18	5·8	4·6	92	5	8·8	7·3	90
5·0 ,, ...	17	6·5	2·6	277	26	8·3	4·3	273	4	8·5	8·4	101	10	6·9	6·7	98	17	8·0	7·3	94				
6·0 ,, ...	15	8·4	5·6	298	23	8·7	5·1	288	1	4·0	4·0	120	9	11·5	10·6	92	15	9·6	8·5	97				
7·5 ,, ...	8	10·4	7·6	296	17	10·8	7·4	294					4	6·7	4·3	31	11	8·1	6·3	87				
9·0 ,, ...	5	7·7	7·1	269	9	9·6	8·8	280					2	5·7	4·3	335	8	7·3	3·8	104				

STATION	NAGERCOIL								NAGPUR												NEW DELHI			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	28	2·6	2·3	40	28	4·4	0·7	51	28	2·4	1·0	349	28	1·8	0·6	337	28	3·3	1·5	204	28	3·0	2·3	328
0·15 a.g. ...	28	6·2	5·0	50	28	6·6	0·7	51	28	6·7	1·6	89	27	5·2	2·3	37	28	4·5	1·9	205	28	10·0	8·1	340
0·6 a.s.l. ...	28	6·8	5·6	45	28	5·6	1·9	62	28	7·3	1·9	134	27	6·5	1·4	98	28	4·7	2·0	211	28	9·8	7·6	335
1·0 ,, ...	28	7·3	5·8	47	28	6·1	4·2	57	28	6·7	2·6	208	27	7·2	1·7	209	28	4·5	2·4	230	27	9·1	7·3	309
1·5 ,, ...	28	7·2	6·0	64	28	6·9	5·4	49	28	6·0	3·9	244	26	7·6	4·4	237	27	5·4	3·3	234	23	7·8	5·4	295
2·0 ,, ...	28	6·5	5·0	76	28	7·7	6·3	45	26	7·1	5·7	261	24	8·3	6·3	255	25	7·4	5·6	260	22	8·7	5·8	285
2·5 ,, ...	27	6·0	4·5	77	27	7·8	6·2	52	25	9·1	8·5	268	23	8·0	6·8	265	25	9·1	7·9	268	14	9·3	7·4	284
3·0 ,, ...	27	6·5	4·5	83	27	6·9	5·5	64	13	11·9	11·1	259	22	9·1	7·8	267	22	11·2	10·3	272	10	8·9	6·9	303
4·0 ,, ...	24	6·1	5·0	90	26	7·3	5·8	82	2	11·7	11·7	268	7	12·8	11·8	278	21	17·3	15·2	273	7	11·6	9·5	280
5·0 ,, ...	23	8·1	6·5	90	25	7·7	6·7	85					9	16·0	15·0	274	18	20·4	18·7	275	2	14·3	10·1	288
6·0 ,, ...	23	11·2	9·2	87	24	9·7	8·3	85					6	18·3	15·7	268	14	23·2	21·0	274				
7·5 ,, ...	19	11·3	9·7	68	18	11·9	9·6	78					1	22·5	22·5	325	6	24·4	21·2	275				
9·0 ,, ...	11	8·9	7·7	65	13	9·3	7·8	77									2	21·3	19·9	252				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

FEBRUARY 1950

STATION	NEW DELHI								POONA												PORT BLAIR			
Time in Km.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	28	3·0	2·5	294	28	4·4	3·1	315	28	2·3	1·6	259	28	1·9	1·7	249	28	4·0	2·6	301	28	1·7	1·2	
0·15 a. g. ...	26	7·1	5·0	324	27	4·1	3·0	311	28	3·5	2·2	280	28	2·6	1·1	268	28	3·9	2·7	258	28	4·6	4·3	
0·6 a.s.l. ...	26	8·4	5·8	324	27	4·3	3·0	311	28	2·7	2·0	258	28	2·1	1·3	228	28	3·3	2·1	268	27	5·3	4·7	
1·0 ,, ...	26	7·9	6·2	307	27	5·0	3·9	307	28	5·5	2·8	279	28	4·8	0·9	338	28	4·0	2·9	248	27	4·4	3·2	
1·5 ,, ...	26	7·6	6·0	297	27	6·1	4·9	283	28	6·1	2·7	227	27	6·0	2·0	218	28	4·5	3·4	239	25	5·4	3·3	
2·0 ,, ...	26	8·4	6·0	284	27	7·3	6·1	272	28	6·4	4·1	189	28	7·3	5·7	199	28	6·0	5·1	241	16	3·8	1·9	1
2·5 ,, ...	24	8·7	6·3	276	27	9·3	7·5	266	28	6·7	5·0	206	28	7·6	6·3	220	28	7·3	5·9	243	12	4·3	1·7	1
3·0 ,, ...	22	10·1	7·7	277	26	10·2	8·7	265	28	7·3	5·5	238	28	7·9	6·4	237	28	8·2	7·0	248	11	4·0	1·1	1
4·0 ,, ...	15	11·7	9·0	270	22	13·4	11·2	275	20	9·2	7·8	259	27	10·0	8·8	259	28	10·5	8·9	260				
5·0 ,, ...	10	12·3	9·2	266	19	17·3	15·8	270	4	11·7	9·3	264	24	11·9	10·1	265	27	11·1	9·7	264				
6·0 ,, ...	8	16·7	12·8	272	16	20·8	19·4	267	3	13·5	13·4	318	22	13·7	11·9	273	26	12·9	10·5	273				
7·5 ,, ...	3	25·3	25·3	276	11	27·4	26·3	262					15	16·1	14·7	282	25	16·1	13·8	280				
9·0 ,, ...	1	25·5	25·5	275	6	41·8	38·9	267					7	16·1	14·2	280	22	19·5	18·1	275				

STATION	PORT BLAIR								RAIPUR												SAHARSA		
Time in I.S.T.	0730				1430				0230				0730				1430				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	28	2·0	1·7	39	28	3·3	3·1	55	28	3·0	0·8	223	28	2·0	0·2	232	28	2·0	1·2	229	28	1·1	0·5
0·15 a. g. ...	28	4·1	3·9	33	28	6·0	5·7	58	25	6·9	1·1	262	28	5·9	0·5	156	28	3·5	2·1	243	27	6·4	3·1
0·6 a.s.l. ...	28	5·8	5·1	53	28	5·4	5·1	50	25	5·9	1·5	281	28	6·9	1·7	202	28	3·3	1·8	253	26	6·4	5·0
1·0 ,, ...	28	5·1	3·9	76	28	4·5	3·0	45	25	4·4	3·1	261	28	5·7	2·5	247	28	3·9	2·3	252	25	7·4	6·6
1·5 ,, ...	27	5·3	3·8	93	27	4·3	2·5	64	25	6·0	5·1	269	28	6·5	4·3	270	28	5·3	3·7	268	24	10·1	9·7
2·0 ,, ...	26	5·3	4·1	92	26	5·5	3·8	83	25	8·1	6·5	276	27	8·9	6·9	282	28	7·3	6·0	271	22	12·5	12·1
2·5 ,, ...	24	5·6	4·0	89	23	5·9	3·6	85	23	8·9	8·1	276	25	9·5	8·5	286	27	8·9	8·0	277	17	12·6	12·2
3·0 ,, ...	23	6·3	4·2	94	21	5·9	3·8	80	18	10·1	9·8	279	25	10·5	9·7	280	27	11·2	10·2	275	15	14·2	13·7
4·0 ,, ...	13	6·2	4·1	83	18	6·0	4·0	75	3	13·6	13·6	259	21	14·3	13·2	277	24	16·6	14·6	277	4	17·2	17·1
5·0 ,, ...	13	6·5	4·1	52	18	7·3	4·7	47					18	18·4	16·6	276	23	22·0	20·3	275	2	21·3	21·1
6·0 ,, ...	13	7·5	3·6	55	15	6·4	2·0	39					16	20·2	18·8	275	20	23·8	22·1	276			
7·5 ,, ...	8	6·6	1·7	33	14	7·6	3·0	55					5	28·2	27·1	278	10	28·8	26·6	266			
9·0 ,, ...	4	6·0	3·7	126	10	7·4	1·8	340									3	33·2	30·6	263			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

FEBRUARY 1950

STATION	SAHARSA				TEZPUR												TIRUCHIRAPALLI							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	28	3·0	2·3	266	28	1·5	1·2	60	28	1·6	1·1	71	28	1·1	CALM		28	1·4	1·2	50	28	1·5	1·1	18
0·15 a.g. ...	28	5·0	3·6	278	23	6·0	4·4	75	28	5·1	3·5	79	28	3·6	0·6	92	28	5·0	3 9	67	28	4·9	3·5	25
0·6 a.s l. ...	28	5·8	4·6	275	23	6·3	2·3	99	27	5·6	2·0	104	27	3·2	0·5	56	28	6·9	5·4	83	28	6·2	3·8	63
1·0 ,, ...	28	7·2	6·1	284	23	4·8	1·1	169	26	5·1	0·8	166	27	2·9	0·6	244	26	6·8	5·7	70	28	5·7	4·1	72
1·5 ,, ...	27	9·7	9·0	290	23	4·4	3·4	254	24	4·2	2·1	244	26	4·3	3·2	237	25	6·1	5·0	69	28	6·0	4·4	72
2·0 ,, ...	27	13·6	13·1	289	21	5·9	5·1	262	20	4·2	2·9	254	25	7·1	6·1	242	23	5·7	3·4	55	27	5·7	4·1	65
2·5 ,, ...	26	17·1	16·8	286	14	6·9	5·6	270	17	5·6	4·1	248	24	9·3	8·1	247	21	5·3	3·2	55	27	5·7	3·9	72
3·0 ,, ...	25	19·5	19·3	284	10	9·3	7·5	260	14	6·9	5·4	273	22	12·1	11·4	259	21	5·2	3·0	75	25	6·5	4·6	87
4·0 ,, ...	22	22·0	21·6	284	3	13·5	12·4	269	9	13·4	12·8	273	15	20·1	19·7	269	6	7·5	5·5	74	23	6·7	4·7	94
5·0 ,, ...	10	24·3	23·9	280					3	12·3	12·2	256	9	29·4	29·2	271					22	7·9	5·9	93
6·0 ,, ...	3	23·0	21·9	290					2	23·7	21·9	274	4	25·0	24·6	271					21	9·8	7·9	81
7·5 ,, ...	2	32·0	30·3	272																	11	8·1	6·2	75
9·0 ,, ...																					6	5·4	3·9	113

STATION	TIRUCHIRAPALLI				TRIVANDRUM				UDAIPUR												VENGURLA			
Time in I.S.T.	1430				0730				0230				0730				1430				0230			
Height in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	28	2·6	1·6	83	28	1·1	0·8	30	28	0·9	0·7	310	28	1·0	0·6	294	28	2·2	0·3	258	28	0·7	0·7	3
0·15 a.g. ...	27	4·1	2·7	82	28	3·5	2·1	20	28	4·6	3·2	1	26	3·8	2·4	360	26	3·7	0·4	257	28	5·0	4·7	2
0·6 a.s.l. ...	27	3·7	2·7	82	28	3·2	1·3	349	...	...	...	...	...	...	...		...	...	...	...	28	6·0	5·0	335
1·0 ,, ...	27	4·4	3·6	73	28	3·0	1·0	64	28	6·4	3·4	10	27	5·9	2·7	25	28	2·9	0·7	277	27	5·6	2·7	284
1·5 ,, ...	26	5·3	4·3	63	28	4·6	3·3	65	28	6·3	1·6	294	28	7·6	1·8	25	27	3·9	2·5	270	26	5·3	2·0	197
2·0 ,, ...	25	5·6	4·1	65	26	5·6	3·9	77	27	7·0	4·4	261	27	7·3	4·5	270	27	5·7	4·6	264	26	6·5	4·0	161
2·5 ,, ...	25	5·6	3·8	70	26	5·2	4·2	83	26	9·3	7·4	263	26	8·7	7·6	260	27	9·1	7·5	268	26	6·5	3·4	167
3·0 ,, ...	24	5·3	3·3	76	24	5·1	4·1	91	24	10·7	9·2	259	24	9·9	8·6	260	27	12·6	11·3	268	24	5·6	2·8	218
4·0 ,, ...	23	6·3	4·1	83	21	6·7	5·8	88	10	11·3	10·9	256	21	14·8	13·2	258	26	18·2	16·5	265	16	4·8	2·9	239
5·0 ,, ...	23	7·1	5·3	81	19	7·8	6·8	90	3	17·2	16·1	258	14	19·0	17·1	264	24	23·5	22·0	266	8	6·3	3·5	252
6·0 ,, ...	21	9·0	7·2	78	17	9·3	7·3	78					7	17·2	15·7	278	20	26·5	25·0	265	6	7·0	3·2	237
7·5 ,, ...	20	9·9	7·2	57	11	7·8	4·7	54					3	20·0	19·4	261	9	28·6	27·1	265				
9·0 ,, ...	16	7·6	3·7	77	7	6·6	3·5	66									2	27·2	27·0	247				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

FEBRUARY 1950

STATION	VENGURLA								VERAVAL												VISAKHAPATNA		
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	28	1·4	1·3	8	28	3·7	3·5	273	28	4·8	4·4	356	28	3·7	3·1	360	28	5·8	4·4	274	28	0·7	0·5
0·15 a. g. ...	28	4·8	4·2	20	28	4·7	4·1	284	27	8·4	6·7	351	28	8·4	7·3	13	28	5·7	4·0	273	28	3·0	1·6
0·6 a.s.l. ...	28	6·2	4·7	357	28	3·5	1·6	299	26	7·3	4·9	352	28	6·8	5·1	14	28	4·8	2·5	344	28	3·7	1·8
1·0 ,, ...	28	6·1	2·9	323	28	3·5	1·1	252	26	5·4	2·2	330	26	4·8	2·6	11	28	4·7	2·7	359	28	3·7	1·1
1·5 ,, ...	28	5·9	3·0	205	27	4·7	2·4	198	26	5·1	1·0	295	26	4·9	1·7	270	26	4·7	1·7	312	28	4·8	2·5
2·0 ,, ...	27	6·3	4·6	182	27	5·4	3·2	185	26	5·6	2·7	251	25	5·8	3·5	256	26	6·2	3·9	274	25	5·7	3·4
2·5 ,, ...	27	6·1	4·5	196	27	5·5	2·8	223	25	7·6	6·2	264	25	7·4	6·2	262	26	7·7	5·8	265	22	6·7	4·9
3·0 ,, ...	27	6·0	3·7	235	27	5·6	2·8	246	23	8·9	7·8	261	25	9·5	8·1	259	24	9·4	8·1	270	19	7·0	5·8
4·0 ,, ...	26	5·5	2·6	252	25	5·8	1·9	272	8	12·6	11·9	269	22	13·3	12·3	261	24	14·6	13·5	262	10	7·2	6·1
5·0 ,, ...	25	6·1	2·9	261	25	6·2	3·4	280					19	17·8	16·2	267	21	18·1	16·5	261			
6·0 ,, ...	25	6·7	3·6	264	25	7·5	4·4	293					13	18·6	16·9	292	16	20·9	19·3	269			
7·5 ,, ...	19	10·0	6·8	297	20	10·9	8·4	289					4	22·1	21·3	298	10	20·9	19·6	271			
9·0 ,, ...	13	9·0	6·6	280	17	12·5	10·5	279					2	27·3	23·3	277	3	24·3	24·3	281			

STATION	VISAKHAPATNAM							
Time in I.S.T.	0730				1430			
Height in Km.	n	V	v	D	n	V	v	D
Surface ...	28	0·3	0·2	264	28	4·6	2·9	146
0·15 a. g. ...	28	2·6	1·1	303	28	5·3	3·3	155
0·6 a.s.l. ...	28	4·0	1·8	218	28	3·8	1·6	192
1·0 ,, ...	28	4·1	1·8	190	27	3·5	0·6	246
1·5 ,, ...	28	5·2	2·1	316	27	5·4	3·3	306
2·0 ,, ...	27	6·4	3·6	315	27	7·2	5·0	308
2·5 ,, ...	26	6·4	4·2	301	27	6·3	4·4	300
3·0 ,, ...	25	6·1	5·1	298	27	6·4	4·8	280
4·0 ,, ...	21	7·4	5·4	288	24	8·5	6·9	250
5·0 ,, ...	13	10·7	7·5	297	20	11·3	8·7	278
6·0 ,, ...	7	9·5	9·1	262	19	12·6	10·4	278
7·5 ,, ...	2	12·3	11·1	274	16	14·5	12·1	279
9·0 ,, ...	1	5·0	5·0	270	6	21·1	18·7	269

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

FEBRUARY 1950

Herght in Km	n	V	v	D
		AHMEDABAD		
10	5	29·7	27·7	265
11	2	38·7	38·0	290
12	1	40·0	40·0	295
		AMBALA		
10	3	26·5	26·4	246
11	2	28·0	28·0	249
		ANANTAPUR		
10	38	7·8	4·3	271
11	21	9·3	5·6	253
12	15	8·5	5·9	209
13	11	9·6	7·8	187
14	7	10·4	7·7	180
15	5	10·3	7·8	160
16	4	6·5	4·1	189
17	2	3·7	3·7	115
18	1	5·0	5·0	125
		BANGALORE		
10	18	7·1	2·3	266
11	9	7·2	2·4	225
12	5	8·6	6·3	179
13	4	9·3	6·7	166
14	4	10·5	6·6	150
15	1	19·0	19·0	135
16	1	23·5	23·5	140
		BHOPAL		
10	1	51·0	51·0	270
		BHUJ		
10	5	36·1	35·4	267
11	1	37·0	37·0	260
		BIKANER		
10	1	23·0	23·0	240
		BOMBAY		
10	2	25·0	25·0	265
11	2	23·5	23·5	270
12	2	28·0	28·0	267
13	1	22·0	22·0	250
		COCHIN (Willingdon Island)		
10	7	5·0	1·1	45
11	5	6·9	4·7	140
12	3	7·7	6·3	188
13	3	9·8	8·0	165
14	2	8·7	8·6	194
15	2	8·7	8·7	249
16	2	12·0	8·2	211
17	2	13·3	10·7	256
18	2	13·0	10·1	295

Height in Km	n	V	v	D
		COCHIN (Willingdon Island) *(Contd.)*		
		CUTTACK		
10	5	28·8	25·6	266
11	1	15·5	15·5	255
12	1	22·0	22·0	245
		DEOLALI		
10	4	22·4	21·5	272
11	1	15·0	15·0	260
12	1	16·0	16·0	240
		GADAG		
10	21	10·5	9·1	280
11	9	7·6	6·4	266
12	6	12·6	11·0	269
13	4	13·7	11·1	269
14	3	9·3	6·3	221
15	3	8·0	3·0	208
16	1	2·0	2·0	105
		GOPALPUR		
10	6	22·6	19·7	260
11	1	15·0	15·0	225
12	1	13·0	13·0	235
		HYDERABAD		
10	9	15·9	15·2	277
11	6	18·7	17·9	287
12	1	13·5	13·5	285
13	1	11·5	11·5	265
14	1	12·5	12·5	260
		JAGDALPUR		
10	13	22·0	19·9	275
11	5	17·6	16·4	255
12	2	13·3	13·1	228
13	1	32·0	32·0	245
		JODHPUR		
10	5	30·9	29·9	279
11	3	45·8	44·7	275
12	1	32·5	32·5	260
13	1	36·5	36·5	255
14	1	33·5	33·5	265

Height in Km	n	V	v	D
		MADHOSAGAR		
10	1	19·0	19·0	250
11	1	30·5	30·5	255
12	1	31·5	31·5	260
13	1	35·0	35·0	260
		MADRAS		
10	22	8·1	3·3	263
11	12	8·0	2·8	216
12	8	11·8	8·8	175
13	7	13·2	11·1	185
14	5	16·1	10·2	188
15	2	13·7	1·7	360
16	2	17·0	10·5	17
17	2	14·0	12·3	44
18	1	4·5	4·5	45
		MALEGAON		
10	11	25·4	24·4	277
11	6	26·7	26·4	262
12	3	27·8	27·2	258
13	1	29·0	29·0	255
		MANGALORE		
10	24	8·6	1·2	173
		MASULIPATAM		
10	13	9·7	8·8	274
11	7	12·4	11·4	274
12	2	7·5	6·8	277
13	2	7·5	6·7	247
14	1	9·5	9·5	190
		MINICOY		
10	8	7·9	4·5	146
11	7	8·1	5·8	154
12	7	10·4	6·7	152
13	6	9·7	6·1	123
14	5	15·1	11·1	120
15	2	14·3	4·8	85
16	1	9·0	9·0	205
17	1	6·5	6·5	195
18	1	11·0	11·0	245
19	1	28·0	28·0	205
20	1	38·0	38·0	205
21	1	56·0	56·0	215
22	1	95·0	95·0	205

Height in Km	n	V	v	D
		NAGERCOIL		
10	21	9·6	7·7	75
11	7	9·5	7·7	90
12	2	9·0	5·7	56
13	1	7·0	7·0	55
		NAGPUR		
10	1	32·0	32·0	235
		NEW DELHI		
10	2	26·3	24·9	263
11	2	32·7	32·5	253
		POONA		
10	25	19·5	18·4	273
11	17	19·8	18·8	263
12	12	20·9	19·7	255
13	13	19·1	17·9	257
14	7	14·1	12·7	261
15	5	14·8	12·8	255
16	2	22·7	21·7	247
17	2	18·7	18·7	235
18	2	12·3	12·2	211
19	2	11·3	11·3	192
20	2	12·0	12·0	201
21	1	12·0	12·0	210
22	1	4·0	4·0	150
		PORT BLAIR		
10	10	7·5	1·7	241
11	4	8·3	5·3	259
12	3	7·7	7·0	229
13	3	9·3	7·1	220
14	2	14·0	14·0	170
15	1	23·0	23·0	150
16	1	22·0	22·0	160
		RAIPUR		
10	2	33·3	32·5	287
11	1	40·0	40·0	280
		TIRUCHIRAPALLI		
10	18	7·2	2·6	103
11	9	8·3	4·0	112
12	5	11·4	7·6	152
13	3	16·7	13·7	166
14	2	16·3	15·6	200
15	2	12·5	12·2	202
16	2	14·7	14·5	212

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

FEBRUARY 1950

Height in Km	n	V	v	D
	TIRUCHIRAPALLI *(Contd)*			
17	2	4·7	4·6	217
18	2	5·3	5·2	32
19	1	8·5	8·5	25
	TRIVANDRUM			
10	6	6·8	3·8	112
11	5	5·2	3·6	127
12	3	4·2	3·7	134
13	2	12·3	12·2	146
14	2	11·0	9·5	119
15	2	21·0	20·7	124
16	1	20·0	20·0	125
	UDAIPUR			
10	1	28·0	28·0	260
	VENGURLA			
10	20	10·3	9·3	274
11	11	12·5	10·9	273
12	5	11·5	10·6	265
13	3	14·5	14·3	267
14	1	24·0	24·0	265
15	1	23·5	23·5	255
16	1	21·0	21·0	235
	VERAVAL			
10	2	31·0	29·6	278
	VISAKHAPATNAM			
10	2	16·0	15·9	262
11	1	10·5	10·5	220

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INDIA WEATHER REVIEW, 1950

MONTHLY WEATHER REPORT

MARCH

Published by authority of the Government of India

CHIEF FEATURES :— (i) Good thunderstorm activity in northeast India, Uttar Pradesh, the Punjab (I) and Western Pakistan during the second half of the month and in the extreme south of the Peninsula during the last week and (ii) six western disturbances.

Six western disturbances affected the weather during the month of which the last three were active. The fourth disturbance moving from Baluchistan to the Punjab (I) between the 12th and 15th caused fairly widespread showers in Baluchistan between 12th and 14th in the Punjab (I) and west Uttar Pradesh on the 14th and 15th and in east Uttar Pradesh on the 15th. The next one moved from Baluchistan to east Rajasthan between the 17th and 20th and caused fairly widespread showers in and near the hills of Punjab(I) and of west Uttar Pradesh on the 20th. The sixth disturbance caused widespread thundershowers over the region from north Baluchistan to West Uttar Pradesh on the 21st and in the Punjab (I) and Uttar Pradesh on the 22nd and 23rd. The details regarding the movement and activity of each of the western disturbances are set out in the following table :

TABLE

S. No.	Period	Course	Region	Nature of Precipitation	Period	Remarks
1	1st–4th	North Baluchistan to north Punjab (I)	North-West Frontier Province	A few showers	2nd & 3rd	
			Kashmir	,,	4th	
			In and near Punjab-Kumaon hills	,,	,,	
1(a)	3rd–5th	East Rajasthan to Madhya Bharat	East Rajasthan	A few showers	3rd	Formed as a secondary of western disturbance 1
			Madhya Bharat	Local showers	3rd & 4th	
			Vindhya Pradesh	Widespread showers	3rd	
			Vindhya Pradesh	Local showers	4th	
			West Madhya Pradesh	Local showers	3rd	
			West Madhya Pradesh	A few showers	4th & 5th	
			East Uttar Pradesh	Fairly widespread thundershowers	4th	
			East Uttar Pradesh	A few showers	3rd	
			West Uttar Pradesh	,,	5th	
2	5th–7th	Baluchistan to Punjab (I)	Kashmir	A few showers	6th	Feeble
			In and near hills of west Uttar Pradesh	,, ,,	8th	
3	9th–11th	North Baluchistan to North-West Frontier Province.	Kashmir	A few showers	10th–12th	
			North-West Frontier Province	Local showers	11th & 12th	
3(a)	10th–15th	Punjab (P) to Eastern Pakistan	Punjab (I)	Local showers in hills	12th & 13th	Formed as secondary of 3.
			Punjab (I)	A few showers in hills	11th	
			Baluchistan	A few showers	11th	
			Punjab (P)	,, ,,	11th & 12th	
			north Rajasthan	,, ,,	11th	
			Bihar	,, ,,	15th	
			Sub-Himalayan West Bengal	Local showers	13th–15th	
			Assam	widespread thundershowers	13th–15th	
			Eastern Pakistan	A few showers	13th–15th	

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S. No.	Period	Course	Region	Nature of Precipitation	Period	Remarks
4	12th-15th	Baluchistan to Punjab (I)	Baluchistan	Fairly widespread thundershowers	12th-14th	
			Baluchistan	A few thundershowers	15th	
			North-West Frontier Province	Local showers	14th	
			,, ,, ,,	A few showers	15th	
			Punjab (P)	Fairly widespread thundershowers	14th	
			Punjab (P)	A few thundershowers	13th.15th.16th	
			Kashmir	A few showers	14th & 15th	
			Punjab (I)	Fairly widespread thundershowers	15th	
			Punjab (I)	A few showers	14th	
			North Rajasthan	,, ,,	14th-17th	
			west Uttar Pradesh	Widespread thundershowers	15th	
			west Uttar Pradesh	Local showers	14th & 16th	
			east Uttar Pradesh	,,	15th	
			east Uttar Pradesh	A few showers	14th	
5	17th-20th	Baluchistan to East Rajasthan	Baluchistan	A few showers	17th & 18th	Caused inflow of moist air int the central parts of the countr which resulted in good thunde storm activity over these region
			North-West Frontier Province	,, ,,	17th	
			Punjab (P)	,, ,,	17th	
			Hills of Punjab(I) & of west Uttar Pradesh	Fairly widespread showers	20th	
6	19th-23rd	Baluchistan to hills of Punjab(I)	North-West Frontier Province	Fairly widespread thundershowers	21st & 23rd	
			,, ,, ,,	A few thundershowers	19th,20th,22	
			Baluchistan	Local showers	19th-21st	
			Punjab (P)	Fairly widespread showers	21st	
			,,	Local showers	20, 22nd, 23rd	
			,,	A few showers	19th	
			Sind	,, ,,	20th	
			Kashmir	,, ,,	21st-23rd	
			Punjab (I)	Fairly widespread showers	21st-24th	
			west Rajasthan	Local showers	21st & 22nd	
			east Rajasthan	A few showers	21st & 23rd	
			west Uttar Pradesh	Fairly widespread showers	22nd & 23rd	
			,, ,,	Local showers	21st & 24th	
			east Uttar Pradesh	Fairly widespread showers	22nd & 23rd	
6(a)	22nd-24th	Madhya Bharat to Vindhya Pradesh	Vindhya Pradesh	A few showers	21st	Secondary of 6.
			west Madhya Pradesh	,, ,,	22nd-24th	
			east Madhya Pradesh	Fairly widespread showers	22nd & 23rd	
			,, ,, ,,	Local showers	21st	

Thunderstorms were active in Madhya Bharat, Vindhya Pradesh and Uttar Pradesh between the 3rd and 8th. Wid spread thundershowers also occurred in Madhya Pradesh, Chota Nagpur and West Bengal on the 20th, in Assam and su Himalayan West Bengal on 21st, in northeast India outside Assam between the 23rd and 26th and in the extreme south the Peninsula in the last week.

Day temperatures were appreciably below normal over most of northern India and in the central parts of the count throughout the month being markedly below normal during the last ten days.

The total rainfall of the month was in moderate to large excess in Orissa, Chota Nagpur, Bihar, Uttar Pradesh, t Punjab (I), the central parts ~~the~~ of the country, north Hyderabad, coastal Andhradesa and Travancore-Cochin and nor in Assam and Tamilnad. It was in slight defect in Rajasthan, in moderate defect in south Hyderabad and in large def elsewhere except in the Bay Islands, Gujarat, Saurashtra and Kutch and Mysore where no rain fell. Averaged over t plains of India, the month's rainfall was 52% in excess.

The mean maximum temperature was above normal in the Bay Islands and below normal in Orissa, Chota Nagp Uttar Pradesh, the Punjab (I), east Rajasthan, Vindhya Pradesh, Madhya Pradesh, Hyderabad, coastal Andhradesa a Rayalaseema. Elsewhere it was normal.

The mean minimum temperature was above normal in Tamilnad, below normal in the Punjab(I) and normal elsewhe

The relative humidity was in excess in Bihar, Uttar Pradesh, the Punjab(I), the central parts of country and no Hyderabad and in defect in the Bay Islands and West Bengal. Elsewhere it was normal.

Mean cloud amount was normal in Assam, West Bengal, West Rajasthan, Saurashtra and Kutch; the Konkan a Mysore and above normal elsewhere.

Data from Jammu and Kashmir are incomplete.

Table I contains the divisional and sub-divisional means of rainfall, temperature, humidity and cloud amounts the 13 chief political divisions and 28 sub-divisions. The stations whose observations are used for preparing these me are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within 24 hours ending at 8·30 hours I.S.T. of the date noted in the succeeding column; similarly the heaviest fall in 24 hours any station denotes the amount recorded during the 24 hours ending at 8·30 hours I. S. T. of the date given in succeeding column.

POONA 5,
dated the 6th June, 1950

S. BASU,
for Director General of Observato

	Rainfall				Departure from normal of				
							0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"	"	"		°	°	mb.	%	
1 Assam (including Manipur and Tripura)	2·61	2·64	-0·03	- 1	+0·1	+0·5	+0·2	+2	+0·1
2 West Bengal ...	0·61	1·25	-0·64	- 51	-0·7	-0·4	-2·0	-6	+0·1
3 Orissa ...	2·77	0·93	+1·84	+198	-2·5	-1·3	-1·2	0	+0·6
4 Bihar ...	1·19	0·63	+0·56	+ 89	-1·8	-0·7	+0·9	+6	+0·8
5 Uttar Pradesh...	1·13	0·48	+0·65	+135	-3·0	+0·4	+1·8	+9	+1·2
6 Punjab(I)(including PEPSU and Delhi) ...	1·09	0·76	+0·33	+ 43	-2·6	-2·1	+0·4	+7	+0·6
7 Rajasthan ...	0·17	0·22	-0·05	- 23	-1·9	+0·1	-0·8	0	+0·4
Division—*Contd.*									
8 Madhya Bharat and Vindhya Pradesh	1·21	0·36	+0·85	+236	-2·4	0	+1·3	+11	+1·3
9 Madhya Pradesh	1·00	0·57	+0·43	+ 75	-2·7	-0·3	+2·1	+12	+1·0
10 Bombay (including Saurashtra & Kutch)	0·03	0·11	-0·08	- 73	-0·7	-0·2	-0·8	-1	+0·2
11 Hyderabad ...	0·52	0·34	+0·18	+ 53	-2·1	-0·5	+0·8	+6	+0·6
12 Madras (including Travancore-Cochin	0·55	0·52	+0·03	+ 6	-1·5	+0·9	-0·1	-1	+0·9
13 Mysore ...	0	0·54	-0·54	-100	-0·9	+1·3	+0·5	+4	+0·2
Mean of India ...	0·85	0·56	+0·29	+ 52	-1·8	-0·1	+0·3	+4	+0·7
Sub-Division									
1 Bay Islands ...	0	1·12	-1·12	-100	+2·0	+1·8	-1·1	-7	+0·8
2 Assam (including Manipur and Tripura)	2·61	2·64	-0·03	- 1	+0·1	+0·5	+0·2	+2	+0·1
3 West Bengal ..	0·61	1·25	-0·64	- 51	-0·7	-0·4	-2·0	-6	+0·1
4 Orissa ...	2·77	0·93	+1·84	+198	-2·5	-1·3	-1·2	0	+0·6
5 Chota Nagpur ...	1·85	0·88	+0·97	+110	-2·2	-1·2	+0·7	+5	+0·7
6 Bihar ...	0·82	0·49	+0·33	+ 67	-1·4	-0·2	+1·1	+6	+0·9
7 Uttar Pradesh, East ...	1·14	0·35	+0·79	+226	-2·8	+0·8	+2·2	+10	+1·4
8 Uttar Pradesh, West ...	1·12	0·60	+0·52	+ 87	-3·2	-0·1	+1·2	+8	+1·1
9 Punjab (I)including PEPSU and Delhi)	1·09	0·76	+0·33	+ 43	-2·6	-2·1	+0·4	+7	+0·6
10 Jammu and Kashmir	...	...	Data	incom	plete	...	...	...	...
11 Rajasthan, West	0·20	0·25	-0·05	- 20	-1·8	-0·5	-1·1	0	0
12 Rajasthan, East, (including Ajmer)	0·15	0·20	-0·05	- 25	-2·1	+0·8	-0·6	+1	+0·7
13 Madhya Bharat	1·49	0·26	+1·23	+473	-1·9	+0·6	+1·1	+10	+1·8
14 Vindhya Pradesh	0·84	0·48	+0·36	+ 75	-3·0	-0·9	+1·7	+13	+0·7
Sub-Division—*Contd.*									
15 Madhya Pradesh, East	1·43	0·79	+0·64	+ 81	-3·4	-0·9	+2·1	+13	+1·0
16 Madhya Pradesh, West	0·73	0·43	+0·30	+ 70	-2·2	0	+2·0	+11	+0·9
17 Gujarat ...	0	0·04	-0·04	-100	-0·5	+1·9	-0·1	-1	+0·4
18 Saurashtra and Kutch ...	0	0·09	-0·09	-100	-1·1	-0·7	-1·8	-1	0
19 Konkan ...	0·01	0·03	-0·02	- 67	-0·5	-1·2	+0·1	+3	+0·2
20 Deccan (Desh)	0·06	0·17	-0·11	- 65	-0·8	-0·2	-0·8	-3	+0·4
21 Hyderabad, North ...	0·86	0·32	+0·54	+169	-2·1	-0·3	+1·6	+10	+0·4
22 Hyderabad, South ...	0·18	0·36	-0·18	- 50	-2·1	-0·6	+0·1	+4	+0·7
23 Coastal Andhradesa	0·60	0·35	+0·25	+ 71	-2·3	-0·4	-0·5	-1	+0·8
24 Rayalaseema	0·07	0·19	-0·12	- 63	-2·2	+0·4	-0·4	0	+0·7
25 Tamilnad	0·48	0·53	-0·05	- 9	-1·2	+2·2	0	-3	+0·9
26 Malabar and South Kanara	0·04	0·45	-0·41	- 91	-0·4	+0·1	-0·4	0	+0·7
27 Mysore ...	0	0·54	-0·54	-100	-0·9	+1·3	+0·5	+4	+0·2
28 Travancore-Cochin	2·25	1·77	+0·48	+ 27	-0·1	+0·3	+0·9	+2	+1·7

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Rela hum
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Bay Islands																				
Port Blair ...	259	1003·1	−0·1	1000·2	89·5	+2·0	92	28	73·3	+1·8	69	12,13	84·6	81·6	75·7	75·6	26·2	−1·1	27·5	65
Assam																				
Dibrugarh ...	348	1001·7	+0·3	997·3	78·8	−0·1	88	8, 9	60·0	−0·8	50	17	67·4	72·2	62·9	66·3	17·6	−0·7	19·3	78
Sibsagar ...	317	1003·0	+0·8	998·5	78·7	−0·5	88	8	60·8	+0·8	53	1,31	68·3	72·6	64·3	66·6	18·8	−0·3	20·4	80
Tezpur ...	258	1004·7	+0·4	1000·1	83·7	+0·2	90	9	62·7	+0·4	57	1	69·9	77·8	64·0	68·3	17·6	−0·3	19·3	72
Gauhati ...	182	1007·0	+0·8	1002·2	85·7	−0·2	91	8,'9	61·2	+1·0	55	3,28,29	70·2	80·1	64·7	67·2	18·4	+0·8	17·6	73
Dhubri ...	115	1009·3	+1·0	1004·8	85·3	−0·7	91	7, 18	64·1	+0·9	59	27	71·8	80·4	65·7	67·9	19·0	+1·4	17·6	71
Silchar ...	96	1010·4	+0·4	1005·9	85·6	−0·9	91	7, 9	63·3	+0·3	58	1,30	72·3	78·1	66·6	70·3	19·9	0	22·3	73
Tura ...	1215	971·2	...	967·7	84·1	...	89	8	64·5	...	57	2	72·6	76·1	64·2	67·1	16·6	...	18·6	62
West Bengal																				
Dum Dum ...	33	1011·4	...	1007·0	92·3	...	98	7, 8	68·2	...	60	30	79·0	87·0	70·6	73·6	21·6	...	22·1	64
Calcutta ...	21	1011·7	+0·5	1007·4	93·4	+0·9	99	7	69·3	+0·5	61	30	79·3	86·7	69·3	70·1	19·9	−3·1	17·8	59
Saugor Island ...	10	1012·1	+0·5	1008·5	85·5	−1·1	91	19,30,31	73·0	−1·2	67	9,26,29	79·8	80·6	72·1	72·7	23·7	−2·6	23·7	68
Sandheads ...	32	1011·2	0	1008·2	...	...	...	...	...	...	...	...	80·0	81·3	74·2	74·1	26·0	−1·8	25·8	75
Midnapore ...	149	1006·8	+0·1	1003·8	93·7	−1·4	101	13,14	67·0	−2·4	61	9	78·3	88·8	67·1	67·2	17·8	−1·7	13·1	54
Contai ...	36	1010·9	...	1007·2	90·1	...	98	17, 8	70·1	...	60	1	78·6	83·2	70·3	71·4	21·3	...	20·7	65
Burdwan ...	106	1008·6	+0·5	1004·1	92·7	−0·6	99	14	67·0	−0·5	61	30	76·0	89·4	65·4	68·4	16·7	−2·3	14·2	54
Krishnagar ...	48	1010·8	+0·7	1006·4	94·4	+1·7	100	13	65·1	−0·6	59	4 days	76·6	88·0	66·8	68·1	17·8	−2·5	14·4	60
Asansol ...	414	998·3	+1·1	993·7	91·6	−2·2	100	13	66·1	+0·2	59	3	77·3	87·2	...	...	...	...	...	...
Berhampore ...	62	1010·5	+0·7	1005·7	92·6	+5·5	100	13	65·1	−0·2	59	2,9,30	77·7	87·6	65·4	67·7	15·6	−2·4	14·1	49
Malda ...	103	1009·1	+1·2	1004·4	88·5	−1·6	93	15, 17	62·3	+0·7	53	2	75·9	83·4	64·2	65·9	15·4	−0·8	13·9	51
Cooch Behar ...	145	1008·2	...	1003·2	85·4	...	89	7, 18	61·0	...	54	18,29	72·6	80·4	64·8	68·2	17·2	...	18·3	64
Jalpaiguri ...	271	1003·4	+0·9	998·3	82·5	−2·7	87	17	60·3	0	54	28,29	68·0	81·9	62·2	66·0	16·3	−0·8	14·5	71
Orissa																				
Balasore ...	65	1010·5	+0·7	1006·7	91·3	−1·4	98	7,8,16	68·8	−0·6	64	1,30,31	79·6	81·1	69·2	72·4	19·6	−2·8	23·5	58
Chandbali ...	20	1011·9	+0·6	1007·8	92·6	−1·0	101	7, 14	68·9	−1·8	64	31	78·1	83·3	71·1	72·4	22·7	−2·6	22·1	70
Puri ...	20	1012·3	+0·8	1008·7	86·1	−0·2	93	9	73·6	−2·0	67	25	80·5	81·3	74·0	75·1	25·8	−2·0	27·2	72
Cuttack ...	87	1009·6	+0·3	1005·1	93·2	−3·4	100	8, 14	70·5	−1·3	66	3,10	76·2	87·9	69·7	70·2	21·9	−3·3	17·5	71
Gopalpur ...	56	1010·9	+0·8	1007·3	87·0	0	91	9, 31	71·3	−1·5	66	1,2,4	78·7	81·4	72·0	75·8	24·0	−1·3	28·1	71
Angul ...	455	997·2	+0·8	992·7	90·7	−5·1	99	13.16	67·5	−0·6	63	2	74·2	87·6	66·8	68·1	19·0	+0·1	14·7	67
Sambalpur ...	486	996·3	+0·9	991·7	90·8	−4·9	99	15	65·2	−1·6	59	10	74·0	86·5	65·6	67·7	17·6	+1·1	14·4	63
Jharsuguda ...	726	988·0	...	983·5	...	...	...	...	...	...	...	...	75·0	85·1	65·4	66·5	17·2	...	14·0	58
Titilagarh ...	691	988·9	...	984·4	92·9	...	100	14,15,16	67·4	...	62	10	74·8	88·5	65·9	69·4	17·6	...	16·1	62
Chota Nagpur																				
Purulia ...	835	984·4	...	979·8	90·7	...	99	13	67·0	...	61	9	76·8	86·5	63·0	65·1	13·3	...	11·4	44
Jamshedpur ...	423	998·2	+1·0	993·6	91·7	−2·3	98	4 days	65·5	+0·7	58	10	75·0	87·1	63·9	65·7	16·0	+0·5	11·9	52
Chaibasa ...	742	987·1	+0·9	982·7	92·4	−1·8	100	14	65·4	−0·4	59	30	73·8	86·8	63·7	65·7	15·8	−1·2	12·2	55
Ranchi ...	2,150	940·0	+1·1	936·6	86·5	−0·4	95	13	59·2	−4·2	50	8	73·1	79·2	59·8	61·4	12·0	+1·1	11·1	45
Hazaribagh ...	2 006	944·6	+1·2	941·4	84·7	−3·0	92	13	61·0	−2·1	55	1	71·3	98·9	59·3	61·3	11·9	+1·3	11·3	49
Daltonganj ...	725	987·9	+0·7	983·4	87·9	−3·3	96	13	59·9	0	50	31	70·9	83·5	62·5	65·3	15·4	+1·9	13·3	62
Dhanbad ...	839	984·1	...	...	90·3	...	97	13,14	64·6	...	60	9,29	75·5	...	61·5	...	12·3	...	...	42
Bihar																				
Purnea ...	124	1008·5	+1·2	1003·6	87·4	−2·0	93	13,20	59·1	−0·3	50	2	71·9	81·5	63·1	66·3	15·5	−0·2	15·4	60
Saharsa ...	156	1006·5	...	1002·5	86·5	...	91	6,13,15	58·8	...	51	1	72·0	82·0	62·9	65·6	15·6	...	14·0	59

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10 or more)		Wind velocity, miles per hour		Wind direction—Number of winds from:—																STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs, I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bay Islands
3·7	+0·8	3·9	0	−1·12	0	...	0	−2·1	5·4	−0·5	4	17	4	1	0	0	1	1	3	0	13	9	2	0	0	0	0	7	Port Blair
																													Assam
4·9	+0·7	3·7	4·78	+0·72	1·37	17	10	+1·5	1·8	+0·4	6	14	5	0	0	0	0	3	3	2	8	3	0	1	0	0	0	17	Dibrugarh
4·4	−0·6	3·9	5·80	+1·40	2·33	15	10	+1·5	3·3	+0·9	7	14	2	1	2	1	0	0	4	8	9	1	0	2	0	0	0	11	Sibsagar
2·7	+0·2	2·3	2·47	+0·55	0·58	13	8	+3·5	4·1 (j)	+0·8	1	8	17	4	1	0	0	0	0	0	5	14	1	2	1	0	0	8	Tezpur
2·2	−0·1	2·8	1·10	−0·89	0·55	17	3	−0·8	2·8	+0·9	8	11	7	1	0	0	0	4	0	1	4	2	0	0	1	4	1	18	Gauhati
1·9	+0·1	2·7	0·10	−1·56	0·09	17	0	−2·5	4·1	−0·4	3	8	7	3	1	2	1	1	5	2	1	0	0	5	6	6	3	8	Dhubri
2·1	−0·6	0·7	3·28	−3·48	1·15	25	8	−0·1	1·3	−0·6	0	0	11	0	0	0	0	1	19	0	0	0	0	0	0	0	0	31	Silchar
0·8	...	1·5	1·27	...	0·75	26	2	...	4·7	...	0	4	5	8	5	2	3	0	3	0	2	1	13	7	1	1	0	6	Tura
																													West Bengal
2·1	...	2·9	0·37	...	0·21	26	2	...	4·8	...	5	1	3	1	5	5	4	5	2	4	2	0	2	6	6	4	7	0	Dum Dum
2·2	0	2·7	0·18	−1·18	0·10	26	1	−1·3	1·8	−1·7	1	1	0	0	4	6	3	5	11	2	0	0	0	5	7	2	3	12	Calcutta
2·8	−0·2	2·7	0·38	−0·91	0·19	20	2	+0·2	12·3	+2·7	5	2	1	1	2	10	4	5	1	1	2	0	3	15	7	1	1	1	Saugor Island
3·6	+1·6	3·7	1·03	+0·21	0·62	20	2	+1·0	...	...	2	0	0	1	1	19	5	3	0	2	1	0	1	8	18	0	1	0	Sandheads
1·2	−0·6	3·3	1·14	−0·27	0·66	23	4	+1·6	3·4	+0·8	8	2	1	0	3	3	1	0	13	4	5	0	0	6	4	3	3	6	Midnapore
2·7	...	2·9	0·34	...	0·19	20	1	...	6·2	...	6	2	0	5	3	5	3	5	2	0	1	0	5	19	2	0	1	3	Contai
1·9	−0·4	2·7	0·47	−1·09	0·30	16	1	−1·3	3·7	+1·7	5	3	1	1	1	5	2	6	7	4	1	0	0	3	5	3	4	11	Burdwan
2·5	+0·1	2·3	0·89	−0·63	0·83	26	1	−1·1	3·5	+0·6	5	2	0	0	10	2	10	1	1	1	0	1	0	5	3	9	9	3	Krishnagar
2·2	+0·4	3·1	0·82	0	0·25	26	4	+2·2	4·0	−0·2	0	0	3	1	2	2	7	8	8	1	0	0	1	0	0	2	11	16	Asansol
2·9	+0·7	3·3	0·14	−0·90	0·08	26	0	−1·9	1·7	−0·5	0	0	2	0	5	1	3	2	18	0	1	1	0	2	3	7	3	14	Berhampore
2·0	+0·9	2·4	0·58	−0·19	0·38	24	1	−0·3	3·6	−0·1	2	2	3	0	2	9	3	4	6	8	1	1	0	1	3	5	11	1	Malda
2·0	...	2·5	0·90	−0·74	0·44	26	4	+1·5	3·3	...	0	2	21	2	1	0	1	2	2	1	2	3	0	2	7	4	0	12	Cooch Behar
1·8	+0·3	2·1	0·35	−0·92	0·16	24	1	−1·3	3·8	+2·0	8	9	8	1	0	0	0	1	3	1	1	4	1	1	6	5	0	12	Jalpaiguri
																													Orissa
2·5	+0·6	4·0 (a)	4·75	+2·91	2·13	16	6	+3·1	4·2	+0·3	6	2	0	0	5	4	1	5	8	0	1	0	8	14	1	0	0	6	Balasore
3·8	+0·2	3·5	1·95	+0·66	0·76	20	4	+1·9	5·8 (a)	−0·2	3	1	0	0	4	5	11	7	0	0	1	2	22	3	1	2	0	0	Chandbali
2·4	+0·1	3·5	1·19	+0·69	0·81	25	3	+2·1	10·8	+0·2	3	2	0	2	1	15	3	5	0	1	0	0	7	15	7	1	0	0	Puri
2·5	0	3·8	3·41	+1·54	1·97	24	1	+1·6	3·2	−1·3	0	1	1	0	0	4	3	0	25	0	0	1	6	6	2	1	1	16	Cuttack
2·1	+1·1	3·1	2·17	+2·37	1·62	26	6	−0·1	8·5	+0·8	12	0	0	0	3	7	2	5	4	2	0	2	3	11	9	1	1	0	Gopalpur
2·6	+0·3	3·5	3·04	+2·31	0·72	30	6	+4·3	4·3	+0·2	3	1	1	0	0	0	15	7	2	13	5	1	2	4	1	3	2	0	Angul
2·9	+1·5	3·5	2·55	+1·69	1·11	23	7	+5·3	2·4	−0·1	8	8	3	0	2	1	0	1	8	7	4	2	2	6	2	1	3	4	Sambalpur
2·9	...	2·7	3·56	...	0·96	23	7	...	...	...	10	2	1	0	0	0	0	1	17	0	1	0	0	1	1	3	4	21	Jharsuguda
2·5	...	2·3	3·19	...	0·76	31	6	...	1·9	...	3	3	1	4	4	1	0	2	13	5	6	0	1	0	1	1	2	15	Titilagarh
																													Chota Nagpur
2·5	...	3·5	0·26	...	0·18	20	1	...	2·7	...	8	1	0	0	3	1	5	13	0	6	4	1	1	0	7	2	10	0	Purulia
1·9	+0·1	3·6	1·84	+1·12	0·45	17,22	7	+5·0	3·5	+0·8	0	1	0	0	0	3	11	9	7	1	3	1	0	3	3	7	8	5	Jamshedpur
3·0	+0·3	4·0	1·42	+0·55	0·27	23	7	+5·3	1·9	−0·1	0	1	1	0	2	13	1	0	13	3	3	0	1	1	7	2	3	11	Chaibasa
1·7	+0·1	2·3	2·01	+0·82	0·64	25	5	+2·5	4·0	−0·6	3	0	0	0	3	1	1	3	20	1	0	0	0	2	4	0	7	17	Ranchi
2·2	+0·5	3·7	1·30	+0·36	0·50	24	4	+2·1	5·6	−0·8	4	1	0	2	3	5	2	10	4	5	1	0	0	1	5	3	15	1	Hazaribagh
2·6	+1·4	3·3	2·69	+2·02	1·35	22	6	+4·4	2·7	−0·1	2	0	6	9	0	0	3	0	11	4	1	1	0	1	0	7	16	1	Daltonganj
...	...	...	1·09	...	0·85	21	2	...	4·6	...	1	2	0	1	0	8	8	3	8	...	...	...	...	...	...	...	...	...	Dhanbad
																													Bihar
2·1	+0·7	2·3	2·33	+1·83	1·60	23	2	+0·9	3·1	+0·3	1	3	6	1	1	8	8	1	7	0	0	0	0	0	4	9	1	17	Purnea
2·0	...	2·6	0·62	...	0·34	23	2	...	2·9	...	2	3	4	1	2	6	6	2	5	0	0	0	0	1	2	9	4	15	Saharsa

(j) Mean of 21 days (a) Mean of 30 days

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T	Departure from normal	Mean 1730
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
Bihar *(Contd)*																						
Darbhanga ...	161	1006·9	+1·0	1002·5	85·9	-3·0	91	17	61·0	+0·5	54	1	71·0	81·9	63·0	68·2	16·1	+1·2	17·6	63	+9	4
Motihari ...	218	1005·1	+1·4	1000·5	86·0	-2·5	92	18	57·1	-1·0	51	2	72·4	80·4	64·4	65·1	17·1	+1·9	14·0	63	+9	4
Patna ...	173	1006·4	+0·8	1002·3	89·2	-0·6	96	13	64·5	+0·2	57	1,2	73·8	84·5	61·6	64·8	13·5	-0·1	12·3	47	+1	3
Dehri ...	352	1000·1	...	996·0	89·3	...	97	13	65·1	...	59	26	73·5	85·1	62·2	64·3	13·8	...	11·0	51	...	2
Gaya ...	365	999·9	+0·9	995·5	90·4	-1·3	97	13	62·6	-0·5	55	2	74·0	86·0	61·8	64·8	13·6	+3·5	11·6	48	+15	2
Dumka ...	489	995·3	+0·5	990·9	91·8	+0·1	100	13	...	...	...	...	75·3	87·2	62·6	65·2	13·9	-0·1	11·3	48	+4	2
Sabour ...	122	1008·3	+1·4	1003·6	88·9	-1·7	94	13,20	58·4	-0·8	47	9	73·8	82·8	64·1	66·3	16·3	+2·2	14·6	58	+8	3
U. P., East																						
Gonda ...	360	999·9	...	996·3	86·5	-3·5	94	16	59·4	+0·3	50	2,29	66·3	81·5	60·1	64·3	15·0	+3·2	12·9	61	+13	3
Gorakhpur ...	254	1002·9	+0·5	999·2	87·7	-2·3	95	16	62·9	+1·5	54	1	76·7	84·7	62·1	66·5	14·8	+1·4	14·7	57	+5	3
Azamgarh ...	255	1002·9	...	999·6	89·6		98	13	61·3	...	52	1,2	68·8	85·2	62·0	68·9	15·9	...	15·6	67	...	3
Banaras ...	250	1003·5	+0·5	999·7	89·2	-2·4	97	14	62·5	+1·0	53	2	71·8	86·3	61·8	65·3	14·4	+1·1	11·8	54	+6	2
Allahabad (Bamrauli) ...	322	1001·5	+0·9	997·4	88·4	-3·3	97	12,13	62·3	+1·3	54	1	71·1	85·1	61·2	64·9	14·0	+2·6	12·0	55	+11	3
Fatehpur ...	375	999·6	...	995·7	88·2	-3·0	92	14	60·9	+0·7	50	1	71·6	86·0	61·5	66·5	14·2	+0·9	13·4	54	+2	3
Banda ...	398	998·5	...	994·3	90·0	...	91	...	61·4	...	54	1	72·8	87·3	61·3	68·2	13·5	...	12·6	49	...	2
Kanpur ...	413	998·2	+1·0	994·7	86·8	-2·6	95	12	61·0	+0·9	49	1	68·3	83·4	60·7	67·3	14·8	+4·0	18·6	63	+18	4
Lucknow ...	371	999·8	+1·2	996·1	86·7 (k)	-2·9	94	12	60·8	+0·2	52	3	67·3	82·3	59·9	65·4	14·3	+1·9	12·3	63	+15	4
Babraich ...	407	998·3	+1·7	994·7	87·0	-1·7	...	..	59·1	+0·3	52	2,29	69·3	80·2	62·6	68·3	16·2	+2·7	18·0	68	+12	5
U. P., West																						
Jhansi ...	823	984·7	+0·7	980·4 (a)	89·3	-3·1	97	12	64·6	+2·5	56	1,29	70·6	85·8 (a)	59·8	65·5 (a)	12·7	+2·3	12·5 (a)	51	+14	3
Agra ...	553	993·6	+0·8	990·2	85·2	-3·6	95	12	59·5	+1·2	51	1	64·9	83·7	56·4	62·8	11·7	+2·0	10·1	56	+13	2
Mainpuri ...	516	994·6	+0·9	991·3	86·8	-3·2	96	12	58·9	+0·5	50	1	67·1	82·8	60·3	67·2	14·9	+3·3	16·0	66	+18	4
Aligarh ...	615	991·2	..	988·4	84·7	-1·4	91	11	57·1	-1·3	49	1	65·2	82·0	57·6	63·9	12·8	+2·7	13·2	61	+14	3
Bareilly ...	568	992·1	+0·6	989·2	83·9	-3·1	92	12	58·7	+0·1	51	28	67·1	80·3	58·1	61·8	12·4	-0·9	10·6	55	-5	3
Meerut ...	762	986·8	...	...	82·0	...	89	11	56·4	...	49	1	62·0	...	55·0	...	11·6	...	...	61	...	.
Roorkee ...	899	980·9	+0·6	978·2	80·2	-3·0	89	11	54·1	-0·9	47	28	62·2	76·7	54·9	59·5	11·4	-0·3	9·7	60	-1	3
Dehra Dun ...	2239	935·7	+0·9	933·7	75·0	-4·3	83	11	51·7	-2·4	42	24	60·3	71·2	53·3	51·4	11·0	-0·6	10·3	62	+4	4
Punjab (I)																						
New Delhi ...	714	988·0 (a)	+1·0	984·8	83·2	-1·8	91	11	57·8 (a)	+0·7	51	1,2,24	65·3 (a)	80·6	55·6 (a)	60·8	10·8 (a)	0	9·2	51 (a)	-1	2
Hissar ...	725	987·9	+1·1	984·0	84·2	-3·6	96	11	53·5	-3·2	44	1	60·7	80·2	54·2	62·2	11·3	+0·8	11·0	64	+13	3
Karnal ...	818	983·8	...	981·5	70·5	...	89	11	54·4	...	47	1	60·1	75·1	53·8	59·6	11·3	...	10·4	63	...	3
Ambala ...	892	981·3	+0·9	979·2	82·3	-2·0	90	11,12	54·2	-2·3	47	26	59·9	76·9	53·8	59·9	11·6	+0·3	10·7	63	+7	3
Patiala ...	822	963·8	...	981·4	79·6	...	88	11	55·1	...	48	26	61·5	74·7	55·1	60·0	11·9	...	11·1	64	...	4
Ludhiana ...	812	984·3	+0·9	982·2	80·3	-2 0	88	10	52·8 (b)	-3·5	45	24	58·2	76·8	53·6	59·8	12·0	+0·6	10·0	72	+11	3
Ferozepore ...	657	...	...	...	79·7	...	89	9.31	52·3	...	44	6	61·5	75·3	54·9	59·8	11·8	...	10·7	69	...	1
Amritsar ...	756	996·6	...	984·5	76·5	...	85	11	50·6	...	43	5	58·2	72·4	54·3	60·5	12·5	...	12·3	77	...	4
Jammu & Kashmir																						
Srinagar ...	5,205	843·1	-0·1	840·8	52·9	-4·0	62	10	37·2	+0·2	30	2	41·0	50·0	38·7	43·5	7·1	-0·5	7·3	83	-2	(
Gulmarg ...	8,709	...	..	...	...	...	...	closed	during	winter	mon ths ...		...	...	...	...	...	...	...	...	...	
Dras (R) ...	10 059																					
Leh ...	11,529	664·8	-0·5	662·5	36·0	-8·2	43	11,13,31	15·8	-5·2	7	1	22·4	31·2	18·1	25·4	1·9	-0·9	2·9	52	-2	
Skardu (R) ...	7,505																					
Gilgit (R) ...	4.890																					
Miagar (R) ...	10,190																					

(R) Register not recieved. (a) Mean of 30 days (b) Mean of 29 days (k) Mean of 20 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from;—																	STATION
											0830 hrs. I. S. T.									1730 hrs. I. S. T.								
Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 h.s. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bihar *(Contd)*
2·5	+1·2	1·9	1·14	+0·63	0·95	23	3	+1·9	1·7	−1·0	0	7	5	1	2	5	5	1	5	0	0	2	0	0	4	3	0	22	Darbhanga
2·2	+1·2	1·1	1·50	+1·01	1·44	23	1	+0·1	2·8	−0·2	1	0	11	1	0	1	5	2	10	2	0	3	0	0	0	5	0	21	Motihari
2·5	+1·1	2·9	...	...	...	...	...	...	4·7	+1·2	1	2	1	2	5	8	5	4	3	5	2	0	0	1	3	8	10	2	Patna
3·3	...	3·5	0·91	+0·47	0·30	16,22	3	+2·0	4·5	...	0	0	0	5	6	12	1	6	1	4	4	0	1	1	0	4	16	1	Dehri
2·9	+1·5	3·1	0·52	+0·03	0·25	16	2	+0·8	5·3	+0·6	0	2	2	0	13	10	2	0	2	5	0	2	0	0	1	14	8	1	Gaya
1·9	+0·7	2·7	0·54	−0·37	0·41	24	2	+0·4	...	...	4	2	0	1	0	9	3	5	7	3	1	1	0	1	16	3	4	2	Dumka
2·3	+0·5	2·9	0·39	−0·03	0·12	26	3	+3·1	4·4	+0·8	1	3	3	1	1	8	7	2	5	3	1	0	0	0	1	10	12	4	Sabour
																													U. P., East
2·9	+1·5	2·9	0·97	+0·79	0·46	22	3	+2·2	3·7	−0·9	0	1	4	0	1	0	11	6	8	3	0	2	0	0	0	8	4	14	Gonda
1·6	+0·5	0·8	0·89	+0·50	0·83	23	1	+0·2	3·3	+1·0	1	2	4	2	0	0	8	0	14	2	0	2	2	0	0	20	1	4	Gorakhpur
1·9	...	2·0	0·58	...	0·43	23	2	...	3·2	...	1	5	1	1	2	7	5	6	3	3	2	3	2	0	1	13	4	3	Azamgarh
2·7	+1·3	2·5	0·68	+0·31	0·39	23	2	+1·1	4·7	+1·2	1	0	6	2	2	14	3	3	0	2	1	0	1	1	0	16	9	1	Banaras
3·2	+1·6	2·7	1·79	+1·23	1·33	22	2	+0·7	3·7	−0·1	1	4	2	3	1	4	7	2	7	5	1	2	2	0	2	6	10	4	Allahabad (Bamrauli)
2·5	+1·2	3·0	2·45	+2·17	2·08	22	2	+1·1	4·0	+0·6	0	2	5	1	1	1	5	7	9	0	1	2	0	0	2	3	13	10	Fatehpur
1·6	...	2·5	1·34	...	0·79	4	3	...	3·6	...	2	0	1	0	1	1	2	0	0	2	1	1	1	2	0	23	1	0	Banda
2·5	+1·7	2·9	0·62	+0·33	0·20	7	2	+1·2	7·1	+1·1	0	2	2	2	1	4	7	2	11	11	7	0	1	0	6	6	0	7	Kanpur
3·3	+1·9	3·3	0·55	+0·21	0·24	23	1	+0·1	2·5	+0·2	4	0	2	1	4	1	13	1	5	4	4	1	0	2	3	10	4	8	Lucknow
2·7	+1·5	3·0	1·17	+0·78	0·87	23	3	+2·2	3·9	+1·8	0	7	3	3	0	3	10	4	7	0	0	2	1	0	2	6	8	12	Bahraich
																													U. P., West
2·3	+1·2	2·2 (a)	2·43	+2·10	1·66	7	2	+1·2	5·7	+2·5	0	4	6	0	2	1	7	1	10	2	7	0	1	0	4	7	5	5	Jhansi
2·1	+0·4	2·7	0·20	−0·12	0·15	15	1	−0·2	3·0	−0·7	0	0	1	0	0	0	1	0	29	2	3	0	0	0	0	1	6	18	Agra
2·9	+1·3	3·2	0·26	−0·08	0·08	7,22	0	−0·8	3·0	+1·3	2	4	5	4	1	2	6	4	3	1	1	2	3	0	2	10	8	4	Mainpuri
2·8	+1·4	3·3	0·41	−0·16	0·20	15	3	+1·7	5·1	−0·8	0	1	3	1	1	1	2	6	16	1	1	1	0	1	0	0	13	14	Aligarh
2·7	+0·9	3·7	0·64	+0·03	0·21	24	3	+1·7	3·9	+1·4	2	3	3	2	1	1	8	6	5	1	1	5	1	0	0	17	3	3	Bareilly
3·0	...	...	1·12	+0·52	0·63	22	3	+1·6	5·2	...	6	3	2	1	0	0	2	12	5	...	...	...	...	...	...	...	...	...	Meerut
3·4	+0·5	3·4	1·08	+0·30	0·48	22	3	+1·4	3·0	+0·5	0	2	0	1	0	0	0	11	17	0	1	0	3	0	3	0	17	7	Roorkee
3·6	+1·2	4·4	2·81	+1·55	0·82	22	8	+5·3	2·3	+0·2	3	2	0	0	0	5	1	2	18	1	4	0	0	1	0	4	2	10	Dehra Dun
																													Punjab (I)
2·9	+1·1	3·5	0·68	+0·17	0·29	22	2	−0·7	6·3	...	3	1	3	4	0	4	7	6	3	6	5	3	2	3	0	1	11	0	New Delhi
2·7	+1·0	2·4	0·57	−0·07	0·39	15	2	+0·5	4·9	+0·6	6	2	3	2	2	4	4	6	1	7	3	5	3	0	1	2	9	2	Hissar
3·6	...	3·5	1·06	...	0·48	16	3	...	4·2	...	5	3	1	3	1	0	7	9	2	1	5	3	1	2	2	7	10	0	Karnal
2·2	−0·1	2·2	1·34	+0·40	0·83	22	4	+2·2	5·7	+2·0	0	0	0	1	0	0	0	13	17	0	0	0	3	0	0	0	12	16	Ambala
2·8	...	4·0	1·53	...	0·91	22	4	...	6·1	...	9	1	2	2	1	0	1	8	7	10	0	4	2	1	0	2	9	3	Patiala
2·7	+0·5	3·2	1·78	+0·84	0·64	22	4	+2·2	3·0	+1·0	0	5	1	2	0	0	3	10	10	0	4	0	1	0	1	1	15	9	Ludhiana
2·2	...	2·7	0·88	...	0·40	14	3	...	2·3	...	3	5	2	1	0	1	1	3	15	5	8	0	1	1	1	1	12	2	Ferozepore
3·7	...	4·1	2·00	...	0·61	22	5	...	3·9	...	7	3	6	1	0	0	2	5	7	9	0	4	2	2	1	1	12	0	Amritsar
																													Jammu & Kashmir
5·6	+0·7	5·9	4·88	+1·27	2·05	22	11	+3·6	2·8	−0·4	3	1	0	8	3	1	4	6	5	5	1	1	2	2	1	4	12	3	Srinagar
																													Gulmarg
																													Dras (R)
4·5	−0·4	5·8	0·75	+0·47	0·28	4	2	+1·1	3·5	+1·5	0	9	1	2	2	3	0	0	14	2	7	0	2	6	7	1	0	6	Leh
																													Skardu (R)
																													Gilgit (R)
																													Misgar (R)

(c) Mean of 28 days

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relativ humidit %	
		Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Rajasthan, West																					
Sri Ganganagar ...	580	(b) 991·7	...	(c) 987·9	80·2	−2·7	89	11	52·0	−0·2	44	1	62·1	76·5	55·8	61·5	12·2	−1·4	11·9	66	+5
Bikaner ...	734	(b) 987·2	+1·0	983·8	85·2	−4·3	96	11	55·6	−2·6	44	1	63·3	83·9	54·1	61·1	10·3	+1·4	8·2	52	+9
Jaisalmer ...	793	984·6	...	981·4	87·7	...	95	31	61·4	...	48	2	66·6	83·2	55·2	64·5	9·9	...	11·2	44	..
Jodhpur ...	736	986·9	+1·6	983·6	89·3	−1·2	95	31	63·0	+1·5	51	24	68·1	87·4	54·4	62·3	8·4	−0·3	7·4	37	+1
Phalodi ...	783	985·3	...	983·5	86·9	...	96	12	59·0	...	51	1	64·7	35·1	53·3	64·3	8·7	...	10·9	41	...
Barmer ...	638	989·9	+0·3	986·8	91·1	+0·9	97	11,14 31	63·6	−0·6	55	25,26	68·2	88·1	55·9	65·7	9·7	−3·9	11·3	41	−14
Rajasthan, East																					
Sikar ...	1419	963·9	...	960·4	84·4	...	91	11	55·5	...	45	8,24,25	66·0	81·1	55·8	62·8	10·6	...	11·9	48	...
Jaipur ...	1431	963·7	+0·2	960·2	85·7	−2·6	92	11,12	60·6	+1·8	49	23,24	70·0	82·7	54·8	58·1	7·6	−0·7	5·7	31	−4
Ajmer ...	1593	958·1	+0·1	954·8	84·6	−3·1	90	15,31	61·2	+1·0	53	23	67·0	82·3	52·6	57·1	7·7	−2·1	6·0	35	−4
Kotah ...	843	983·4	+0·1	979·2	90·5	−2·2	97	14,15	64·1	−1·1	57	1,24	70·5	88·1	56·4	61·8	9·3	+0·1	7·0	37	+3
Jhalawar ...	1053	975·6	−0·5	971·2	91·1	−0·3	97	12,14,15	62·1	+1·4	53	9	69·0	89·3	56·1	62·9	9·5	+0·4	7·4	40	+4
Udaipur ...	1910	947·4	...	944·0	87·5	...	93	13,14	59·9	...	50	24	68·9	84·8	54·7	60·9	9·1	...	8·6	37	...
Madhya Bharat																					
Gwalior ...	681	988·6	...	984·9	88·0	...	97	12	59·4	...	52	9,29	70·5	84·7	57·9	62·2	10·7	...	9·0	44	...
Guna ...	1571	958·4	−0·7	955·3	88·7	−1·6	98	4	59·0	+1·3	49	25	67·1	84·9	56·5	62·0	11·4	+2·1	9·7	51	+14
Neemuch ...	1626	957·1	+0·2	953·7	89·5	−1·1	95	12	62·1	+1·0	54	9	69·2	87·0	55·4	63·7	9·4	−0·4	10·7	39	+2
Ratlam ...	1596	958·2	...	954·2	92·0	...	97	16,17	63·1	...	53	8,23,25	67·5	89·7	54·0	64·1	8·6	...	10·3	39	...
Indore ...	1839	949·5	−0·4	945·6	90·2	−3·2	97	15	59·4	+0·1	47	25	71·1	88·2	57·7	65·3	10·9	+0·2	12·0	43	+11
Bhopal ...	1643	956·3	...	952·3	89·4	−1·8	97	15	61·8	−0·1	52	8	70·9	87·1	57·8	62·9	11·1	+2·4	9·7	44	+12
Bairagarh ...	1714	953·8	−0·1	950·1	90·0	−1·6	98	15,16	61·6	−0·3	50	8	70·3	87·1	56·8	62·2	10·1	+1·7	8·9	43	+14
Madhosagar ...	757	986·4	...	982·5	87·7	...	96	12	62·0	...	54	1	70·1	85·5	57·6	62·6	10·7	...	8·8	43	...
Vindhya Pradesh																					
Nowgong ...	750	987·0	+0·8	982·8	87·6	−4·1	94	12	59·1	−0·5	50	1	71·3	85·9	59·1	63·3	11·6	+0·1	9·7	45	−1
Sutna ...	1041	976·6	+0·6	972·5	88·6	−1·9	97	12	60·0	−1·4	53	9	69·1	84·9	59·7	64·6	12·5	+1·7	10·8	52	+22
Umaria ...	1506	961·5	...	957·4	87·3	−3·1	93	12,15	58·6	−0·7	52	9,24	69·5	83·1	60·6	64·7	14·5	+3·2	13·4	59	+17
Madhya Pradesh East																					
Gondia ...	1026	972·2	...	973·2	90·9	...	99	15	65·6	...	57	26	74·2	88·3	65·0	69·5	16·9	...	16·1	59	...
Pendra ...	2040	943·4	+0·3	940·0	84·9	−2·4	92	13,15	62·0	+0·4	54	26	71·0	79·5	60·1	62·0	13·3	+1·9	12·9	53	+12
Champa ...	805	985·2	...	980·9	90·3	...	99	15	65·9	...	61	4 days	72·6	86·7	64·5	68·7	17·1	...	15·9	64	...
Raipur ...	979	979·1	+0·8	974·7	89·6	−5·6	98	15	67·6	+0·4	61	10	73·7	87·8	65·0	68·1	17·3	+4·5	14·7	62	+22
Kanker ...	1318	967·4	+0·6	963·2	90·9	−2·6	99	15	64·4	−1·1	56	10	72·7	88·1	65·0	69·6	17·6	+2·0	16·4	64	+11
Chanda ...	634	990·3	+0·2	985·5	94·4	−4·6	101	28	66·2	+0·8	58	9,10	75·4	88·1	66·1	67·9	17·5	+3·0	14·2	56	+14
Jagdalpur ...	1815	950·8	+0·1	946·3	93·0	−2·0	99	20	61·9	−1·7	55	6	72·1	87·3	63·9	64·9	16·9	−0·9	11·9	64	+7
Madhya Pradesh West																					
Buldhana ...	2133	939·5	...	935·9	91·6	...	98	15	60·3	...	61	8	73·6	89·6	60·3	67·7	12·5	...	13·7	45	...
Akola ...	925	980·0	−0·2	975·0	97·3	−0·5	103	15	66·8	+0·8	55	25	73·6	94·9	60·4	67·3	12·0	+2·5	10·4	43	+11
Amravati ...	1213	970·5	+0·2	965·8	95·1	−2·4	101	15	69·5	+0·1	54	26	76·9	93·2	61·0	65·3	11·1	+0·6	9·3	35	+3
Yeotmal ...	1481	961·5	...	957·2	94·4	...	100	12	(a) 67·6	...	59	25	75·9	91·3	62·6	66·4	13·4	...	10·6	45	...
Khandwa ...	1044	975·8	−0·4	971·3	95·8	−1·6	103	15	64·6	+0·1	53	9,10,25	74·5	93·2	59·6	67·0	10·7	+1·5	10·8	38	+5
Hoshangabad ...	992	978·3	−0·1	973·6	93·7	−0·8	101	15	65·9	+1·1	52	9	72·6	90·5	59·5	65·2	11·5	+1·7	9·8	43	+9
Sagar ...	1808	950·5	+0·1	946·6	87·4	−3·2	97	15	63·6	−1·2	55	8	70·4	84·2	55·7	60·4	9·0	+0·6	8·3	37	+7
Jabalpur ...	1289	968·3	+0·6	964·2	90·7	−0·9	98	15	60·4	+1·6	50	25	71·2	86·1	61·2	65·7	13·9	+2·5	12·4	55	+12
Seoni ...	2027	943·5	+0·8	940·0	87·6	−4·3	95	14,15,16	62·0	−0·7	53	25	70·6	82·5	60·2	64·3	13·5	+2·8	13·0	56	+19

(a) Mean of 30 days (b) Mean of 29 days (c) Mean of 28 days.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																				STATION
											0830 hrs. I.S T.											1730 hrs. I.S.T.										
Mean 0830 hrs. I.S.T	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Rajasthan, West
1·1	−1·3	1·3	0·54	+0·03	0·36	21	2	+0·6	...	...	4	3	6	5	1	1	0	2	9	5	1	1	0	0	2	3	12	7	Sri Ganganagar
1·7	−0·1	2·0	0·46	+0·23	0·35	14	1	+0·4	3·4	−0·8	0	10	1	9	1	4	0	1	5	3	8	1	2	0	3	2	12	0	Bikaner
3·1	...	2·8	0·22	...	0·22	21	1	...	6·6	...	0	17	0	4	2	2	0	3	3	4	4	0	0	1	9	1	11	1	Jaisalmer
2·8	+0·8	3·0	0	−0·11	0	...	0	−0·2	5·3	−1·6	1	16	4	0	1	2	1	1	5	3	4	3	1	0	3	9	8	0	Jodhpur
2·7	...	2·4	0	−0·14	0	...	0	−0·4	7·0	...	2	2	10	7	2	3	3	2	0	4	3	2	1	2	7	3	9	0	Phalodi
2·3	+0·7	0·2	0	−0·25	0	...	0	−0·6	5·1	−0·7	4	1	0	0	0	2	2	17	5	1	12	1	1	0	7	4	3	2	Barmer
																													Rajasthan, East
2·6	...	4·0	0·30	...	0·22	22	1	...	5·8	...	0	3	7	8	3	1	0	0	9	4	3	3	4	0	3	8	5	1	Sikar
2·3	+0·6	3·3	0·12	−0·22	0·07	21	0	−0·9	5·4	+1·1	2	2	10	6	0	0	0	0	11	8	2	1	1	0	4	7	6	2	Jaipur
2·1	+0·7	3·1	0·17	−0·06	0·16	7	1	+0·3	5·2	+2·0	1	9	1	2	1	2	4	3	8	3	5	0	1	1	4	8	5	4	Ajmer
1·9	+0·4	2·7	0·10	−0·07	0·10	3	1	+0·5	2·9	+0·8	1	1	1	0	0	2	5	1	20	3	4	0	0	1	0	9	7	7	Kotah
2·5	+1·3	3·2	0·36	+0·22	0·25	7	2	+1·4	3·7	+0·7	2	1	1	5	2	1	1	3	15	3	5	0	0	2	2	10	8	1	Jhalawar
1·8	...	3·5	0	−0·10	0	...	0	−0·3	3·1	...	5	1	1	0	0	1	2	5	16	3	4	1	3	3	7	3	5	2	Udaipur
																													Madhya Bharat
2·7	...	3·9	0·35	...	0·20	7	2	...	1·8	...	3	3	2	1	6	1	2	7	7	2	4	3	1	1	1	4	11	4	Gwalior
2·9	+1·9	3·3	4·17	+3·67	2·36	7	4	+3·1	4·6	+1·6	4	1	7	13	2	2	1	1	1	5	0	0	1	0	7	7	11	0	Guna
3·0	+2·1	4·4	0·04	−0·08	0·04	3	0	−0·3	4·6	−0·5	1	15	1	1	0	2	2	0	9	3	9	2	0	0	3	8	2	4	Neemuch
1·9	...	3·2	0	...	0	...	0	...	5·8	...	2	18	0	1	2	1	2	1	4	5	3	1	0	1	5	9	7	0	Ratlam
2·5	+1·4	3·1	0·21	+0·13	0·19	7	1	+0·7	5·3	−0·5	1	6	5	5	1	3	5	1	4	1	2	0	1	4	6	7	8	2	Indore
2·8	+1·7	2·6	1·55	+1·21	0·90	8	4	+3·2	4·5	+1·4	2	6	5	7	0	4	3	1	3	1	2	2	2	2	5	9	6	2	Bhopal
2·6	+1·5	3·0	0·99	+0·65	0·67	8	2	+1·2	6·2	+0·1	3	6	4	8	1	3	0	4	2	3	1	0	4	3	3	7	8	2	Bairagarh
3·2	...	3·9	0·56	...	0·26	5	4	...	4·5	...	1	5	3	2	1	5	2	3	9	5	4	2	3	1	2	6	7	1	Madhosagar
																													Vindhya Pradesh
2·0	+0·2	3·4	1·25	+0·95	0·45	3	4	+3·2	3·2	+1·3	2	5	6	1	1	9	2	0	5	6	6	1	0	2	1	11	8	1	Nowgong
2·3	+0·8	2·1	0·25	−0·20	0·70	3	1	−0·1	3·7	+0·6	0	0	6	4	4	5	2	2	8	5	2	3	0	3	5	0	11	2	Sutna
2·9	+1·1	3·0	1·03	+0·33	0·75	3	2	+0·3	...	...	2	1	6	9	0	0	1	2	9	3	2	0	3	1	2	2	7	10	Umaria
																													Madhya Pradesh East
1·1	...	1·9	0·36	...	0·16	19	3	...	2·9	...	5	6	6	7	3	1	0	0	3	5	5	1	3	0	5	0	2	10	Gondia
1·9	+0·5	3·6	0·96	−0·13	0·48	8	4	+1·7	4·4	+0·6	10	2	0	0	9	2	2	4	2	9	2	1	3	9	1	2	4	0	Pendra
2·3	...	3·2	2·74	...	1·35	23	6	...	4·0	...	12	3	4	4	0	0	1	5	2	7	3	1	1	3	5	5	4	2	Champa
3·1	+1·8	3·3	2·68	+1·97	0·80	25	6	+4·3	4·0	−0·2	9	5	4	1	6	1	1	2	2	7	4	3	1	2	3	6	1	4	Raipur
2·8	+1·1	3·2	2·82	+1·97	1·31	23	4	+1·9	1·2	−3·0	0	0	0	0	1	0	0	1	29	1	1	2	1	0	1	4	3	18	Kanker
2·1	+0·9	3·5	0·20	−0·57	0·17	17	1	−0·2	3·0	+0·6	1	1	0	12	0	1	0	4	12	0	0	2	12	1	1	0	5	10	Chanda
2·2	+0·9	4·0	0·47	−0·06	0·18	26	2	+0·8	3·2	+0·7	2	2	0	4	0	7	0	1	15	0	8	0	8	2	1	2	9	1	Jag lalpur
																													Madhya Pradesh West
3·2	...	3·4	0·02	...	0·02	31	0	...	(o) 6·7	...	1	1	1	0	3	4	0	6	0	1	1	0	2	2	3	0	6	0	Buldhana
2·0	+0·7	2·9	0	−0·36	0	...	0	−0·7	4·3	+0·7	2	5	6	6	1	1	1	4	5	2	4	3	3	3	2	5	7	2	Akola
1·6	+0·4	2·8	0	−0·35	0	...	0	−0·8	6·4	+2·2	0	30	0	0	0	1	0	0	0	0	15	0	2	0	6	0	8	0	Amravati
2·0	...	3·0	0·60	...	0·24	16	3	...	6·7	...	3	5	10	6	2	1	0	3	1	3	4	2	6	4	2	6	4	0	Yeotmal
2·5	+1·6	4·2	0·40	+0·23	0·35	2	1	+0·5	5·1	+1·0	2	9	3	2	0	2	7	3	3	4	0	2	1	4	4	7	9	0	Khandwa
3·1	+1·9	3·2	1·37	+1·03	0·60	4	3	+2·4	3·0	+0·8	1	5	7	3	1	1	0	0	13	4	3	1	1	3	4	2	3	10	Hoshangabad
2·8	+1·5	3·2	0·31	−0·02	0·21	8	2	+1·1	11·9	+1·9	2	3	5	6	5	4	5	1	0	2	4	2	3	2	4	5	9	0	Sagar
1·9	+0·7	3·1	1·35	+0·79	0·60	20	3	+1·6	3·2	+1·2	0	4	1	6	5	0	2	1	12	4	6	1	4	1	1	3	4	7	Jabalpur
1·1	−0·2	2·8	1·36	+0·57	0·55	22	5	+3·0	4·3	+1·4	3	4	2	2	2	0	0	0	18	5	4	3	8	7	1	0	3	0	Seoni

(o) Mean of 16 days.

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relativ humidi %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Madhya Pradesh West *(Contd.)*																					
Chhindwara ...	2,248	936·2	...	932·7	87·9	...	95	15	61·0	...	53	9,26	69·9	84·8	58·5	62·0	12·1	...	9·8	50	...
Betul ...	2,144	939·8	...	935·0	89·2	...	97	15	61·2	...	49	9	72·9	85·7	58·8	61·9	11·2	...	9·3	42	...
Nagpur ...	1,010	977·6	+0·4	973·0	93·5	−3·2	101	15	65·0	−1·7	56	2,5	75·0	89·6	63·7	66·9	15·0	−4·1	12·5	51	+18
Gujarat																					
Deesa* ...	466	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Surat ...	39	1011·3	+0·3	1007·1	95·9	−0·2	107	31	66·3	−0·7	61	24	72·2	86·7	65·9	72·3	18·9	+1·1	20·5	71	+11
Ahmedabad ...	163	1006·6	−0·3	1002·6	94·7	−2·3	101	31	69·1	+1·6	60	24	72·3	92·7	59·4	65·4	11·5	−0·6	9·1	44	+1
Dohad ...	1,093	974·3	...	970·6	93·9	−0·4	99	31	66·2	+2·3	55	24	71·6	91·3	57·8	65·2	10·2	−1·0	9·5	38	−6
Baroda ...	115	1007·8	...	1003·7	97·3	+1·2	104	31	61·8	+1·9	54	24	71·7	95·3	60·5	68·1	13·0	+1·2	11·2	50	+3
Saurashtra & Kutch																					
Bhuj ...	343	1001·0	+0·4	997·5	91·2	−1·6	98	31	63·5	−0·8	56	2	69·2	89·6	60·4	63·6	13·9	−1·8	8·4	58	+2
Dwarka ...	37	1011·6	−0·2	1009·0	82·0	−0·3	97	30	68·8	−1·8	61	24	72·2	78·1	66·9	70·5	20·1	−1·1	22·1	75	−1
Jamnagar ...	60	1010·8	+0·1	...	88·6	−1·9	95	30	62·9	−0·3	56	1,2,4	69·9	...	64·2	...	18·0	−1·2	...	70	0
Rajkot ...	432	997·0	−0·4	993·3	94·0	−1·1	101	31	62·6	+0·5	56	8	68·0	91·8	61·0	68·3	15·2	+0·1	13·0	66	+6
Veraval ...	26	1011·3	−0·6	1008·5	85·3	...	100	31	62·8	...	55	11	69·8	78·9	61·4	72·1	15·2	...	24·1	62	−1
Bhavnagar ...	55	1010·1	−0·7	1006·3	95·0	−0·7	102	31	65·5	−0·1	57	11	69·6	92·7	57·1	64·8	10·4	−3·2	8·4	42	−5
Konkan																					
Dahanu ...	15	1011·1	...	1008·4	84·0	...	88	9	66·1	...	60	2	73·0	81·2	68·0	75·1	21·1	...	27·0	77	...
Bombay ...	35	1010·9	−0·2	1007·4	86·5	+0·3	90	10,11,27	71·0	−0·9	67	12	77·4	82·2	70·5	73·7	22·3	−0·8	24·5	70	−3
Alibag ...	23	1011·7	+0·4	...	84·5	−0·9	90	9,11,27	68·3	−1·1	63	12	74·0	...	69·1	...	22·0	+1·1	...	77	+12
Harnai ...	66	1009·7	...	1006·2	84·8	...	86	20	70·8	...	63	7	77·1	79·9	69·3	74·7	20·9	...	27·0	68	...
Devgad ...	117	1007·2	...	1004·1	85·6	...	90	6	72·6	...	66	8	74·8	83·5	70·5	75·1	23·5	...	25·9	80	...
Vengurla ...	29	1010·6	...	1007·1	89·4	...	97	11	67·7	...	59	8	74·5	84·9	69·7	74·9	22·7	...	25·0	77	...
Marmagao ...	202	1004·3	−0·6	1001·2	84·6	−0·5	90	6	72·7	−1·7	70	8,9	77·0	82·2	71·4	74·2	23·8	−0·5	25·3	75	+1
Honavar ...	85	1009·5	...	1006·0	88·2	...	92	6	71·4	...	66	3,9	76·1	84·5	71·0	76·1	23·7	...	26·9	76	...
Deccan (Desh)																					
Jalgaon ...	660	989·4	...	984·7	98·9	...	104	15	64·0 (g)	...	55	10	75·3	97·1	59·9	66·6	10·7	...	8·6	36	...
Malegaon ...	1,432	963·4	0	958·3	96·6	−0·9	102	15	62·7	0	54	7	73·9	93·7	58·7	66·0	10·0	−1·3	9·4	33	−7
Deolali ...	1,874	948·2	...	...	93·8	...	99	15	59·3	...	53	11	73·2	...	58·6	...	10·9	...	...	39	...
Ahmednagar ...	2,154	939·0	0	934·9	94·8	−0·6	100	15	62·5	−0·6	56	25	72·7	92·8	58·4	64·1	10·9	−0·2	8·9	40	+10
Poona ...	1,834	949·6	−0·3	945·3	95·3	−1·6	103	15	62·2	+0·5	54	25	70·2	92·5	59·3	65·8	12·8	−0·5	10·9	51	−3
Sholapur ...	1,570	958·2	−0·1	953 5	97·9	−1·2	102	5 days	69·3	0	63	8,25	77·0	95·8	60·1	65·5	10·9	−0·2	9·1	35	0
Miraj ...	1.817	949·8	−0·6	945·1	97·3	+1·7	102	15	64·3	−0·2	58	12	72·1	94·9	59·7	65·8	12·5	−2·2	9·9	44	−8
Kolhapur ...	1,885	948·1	...	943·6	95·8	...	101	15	64·3	...	60	25	71·1	92·2	59·4	65·2	12·6	...	10·3	49	...
Bijapur ...	1,950	945·3	−0·5	940·9	96·1	−0·9	101	15	68·6	−1·6	62	26	76·2	94·2	61·7	69·1	12·9	−1·4	14·1	41	−6
Belgaum ...	2,562	926·0	+0·1	922·4	92·6	−1·0	96	14	63·0	−0·6	58	8	73·1	86·5	58·5	65·4	10·9	−2·7	12·8	40	−13
Gadag ...	2,131	939·9	0	935·5	96·4	+0·9	100	13,14,15	69·4	+0·6	65	3,26	77·5	93·5	65·9	72·0	17·0	+0·4	18·1	52	−5
Hyderabad, North																					
Aurangabad ...	1.905	947·7	−0·3	943·4	95·5	−0·4	99	14,15,16	67·1	+0·2	57	25	74·6	93·9	59·8	66·6	11·6	+2·2	11·6	40	+8
Parbhani ...	1 350	964·6	...	960·0	96·3	...	102	15	72·9 (g)	...	57	25	75·0	93·5	63·6	71·1	14·9	...	15·9	51	...
Ramagundam ...	527	994·7	...	1007·0	94·6	..	101	13,14	70·9	...	60	26	78·2	91·7	68·1	69·7	19·0	...	14·9	58	...
Nizamabad ...	1,250	968·2	−1·1	964·5	94·7	−3·6	101	22	68·8	−0·1	59	26	74·4	91·9	64·2	67·3	16·0	+1·0	11·7	55	+11
Bidar ...	2,178	937·7	...	934·1	92·8	−2·1	98	15,21,22	69·9	−1·8	65	5,28	75·4	89·6	64·9	67·5	16·7	+3·6	14·1	55	+14

* Data not reliable.

(g) Mean of 24 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																					STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.											
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		53
																														Madhya Pradesh West *(Contd.)*	
2·1	...	2·3	0·75	...	0·26	20	3	...	3·7	...	3	5	8	2	1	0	1	0	11	3	1	2	2	5	6	4	7	1		Chhindwara
2·3	...	3·9	0·52	...	0·50	2	1	...	3·6	...	2	2	7	7	1	1	2	0	9	5	5	1	3	3	2	4	6	2		Betul
2·2	+0·8	3·6	1·17	+0·57	0·58	23	2	+0·5	4·2	...	5	14	10	0	0	0	1	1	0	3	9	4	5	4	2	1	2	1		Nagpur
																													Gujarat	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		Deesa *
1·3	+0·3	1·0	0	−0·01	0	...	0	−0·1	3·8	+0·5	2	6	3	7	4	2	0	0	7	0	0	0	2	0	12	0	17	0		Surat
1·4	+0·3	1·9	0	−0·05	0	...	0	−0·2	3·1	−0·6	2	6	6	1	0	0	3	7	6	3	1	1	1	0	2	7	10	0		Ahmedabad
1·8	+0·6	2·2	0	−0·06	0	...	0	−0·2	8·3	+5·0	2	4	5	4	6	5	3	2	1	6	1	2	0	0	9	10	3	0		Dohad
1·1	+0·2	1·2	0	−0·02	0	...	0	0	1·8	−0·9	1	2	1	1	1	2	1	1	21	4	1	1	0	1	5	5	6	8		Baroda
																													Saurashtra & Kutch	
1·2	0	1·8	0	−0·11	0	...	0	−0·2	4·0	−1·6	1	0	0	0	0	3	7	2	18	4	4	0	1	2	2	9	6	3		Bhuj
1·8	0	1·7	0	−0·11	0	...	0	−0·2	10·1	+0·7	15	4	0	0	0	2	4	6	0	2	1	0	0	0	0	11	17	0		Dwarka
0·9	−0·2	...	0	−0·08	0	...	0	−0·1	2·2	−6·7	0	0	1	0	0	3	4	0	23	...	...	...	...	...	..	...	...	...		Jamnagar
2·0	+0·2	2·3	0	−0·06	0	...	0	−0·1	7·7	+1·7	3	3	1	0	0	2	4	9	10	3	5	2	2	0	0	3	16	0		Rajkot
1·0	0	0·9	0	−0·05	0	...	0	−0·1	10·6	...	16	5	0	0	0	0	0	8	2	0	0	0	0	2	2	16	11	0		Veraval
1·2	0	1·7	0	−0·11	0	...	0	−0·2	4·8	0	0	1	0	0	0	7	13	1	8	1	3	12	7	6	0	1	1	0		Bhavnagar
																													Konkan	
2·3	...	1·0	0	...	0	...	0	...	7·9	...	2	1	14	13	0	0	1	0	0	3	0	0	0	0	0	17	11	0		Dahanu
1·8	+0·5	1·1	0	−0·05	0	...	0	−0·1	5·8	−1·4	5	6	4	4	2	1	0	0	9	7	0	0	0	0	0	3	21	0		Bombay
1·5	+0·2	...	0·02	0	0·02	31	0	−0·1	3·9	−2·1	6	7	1	1	1	0	0	0	15	...	...	...	...	...	...	...	...	...		Alibag
...	..	...	0	...	0	...	0	...	9·4	...	6	1	5	1	1	1	4	12	6	0	0	0	0	0	0	2	29	0		Harnai
2·1	...	2·0	0	...	0	...	0	...	9·9	...	4	18	8	0	0	0	0	1	0	0	0	0	0	0	0	9	22	0		Devgad
1·9	...	1·9	0	...	0	...	0	...	...	...	2	2	0	0	0	0	0	1	26	0	0	0	0	0	0	27	4	0		Vengurla
2·4	−0·2	2·8	0	−0·01	0	...	0	−0·1	7·3	+0·9	8	4	11	2	5	0	1	0	0	0	0	0	0	0	0	16	15	0		Marmagao
3·1	...	3·1	0	−0·05	0	...	0	−0·1	2·9	...	0	4	19	4	0	0	0	1	3	0	1	1	1	0	0	14	13	1		Honavar
																													Deccan (Desh)	
1·8	...	2·5	0·06	−0·09	0·06	4	0	−0·5	4·8	...	1	1	8	5	0	3	8	1	4	3	1	3	0	1	5	2	16	0		Jalgaon
0·7	−0·4	2·9	0	−0·08	0	...	0	−0·3	3·9	−1·2	0	0	0	0	0	0	0	1	30	0	3	1	1	1	2	8	7	8		Malegaon
1·1	...	...	0	...	0	...	0	...	5·0	...	0	4	3	6	1	3	2	2	10	...	...	...	...	...	...	...	...	...		Deolali
1·2	+0·4	2·9	0	−0·21	0	...	0	−0·3	4·2	−1·1	6	0	0	4	0	1	0	8	12	2	1	0	4	2	3	3	13	3		Ahmednagar
1·5	+0·7	2·1	0	−0·06	0	...	0	−0·2	2·3	−2·8	1	0	0	0	1	1	5	0	23	0	0	6	0	1	2	8	9	5		Poona
1·5	+0·5	2·4	0·28	+0·05	0·25	19	1	+0·5	4·0	−1·7	1	5	2	6	0	2	0	1	14	3	3	0	4	2	4	0	3	12		Sholapur
1·4	+0·4	3·1	0	−0·15	0	...	0	−0·7	5·2	−0·1	2	5	3	2	2	0	7	7	3	3	2	4	2	5	5	8	2	0		Miraj
0·7	...	1·3	0·28	...	0·28	31	1	...	6·7	...	0	4	3	0	0	2	3	0	18	0	2	4	0	0	1	20	1	3		Kolhapur
1·0	+0·1	2·3	0·20	−0·01	0·20	31	1	+0·4	4·3	+0·3	11	2	0	2	3	3	1	5	4	5	5	3	3	2	1	2	6	4		Bijapur
1·0	+0·1	1·3	0	−0·41	0	...	0	−0·9	4·2	+0·9	8	5	3	4	1	0	1	5	4	1	3	4	2	0	10	9	2	0		Belgaum
2·2	+1·3	3·4	0	−0·22	0	...	0	−0·7	3·7	−1·2	2	0	4	4	2	4	4	4	7	1	4	6	3	1	1	3	2	10		Gadag
																													Hyderabad North,	
1·9	+0·8	3·1	0·19	−0·01	0·15	31	1	+0·5	5·8	−0·4	2	5	8	5	4	0	3	3	1	2	4	1	2	1	8	6	7	0		Aurangabad
2·1	...	2·7	1·11	+0·84	0·70	29	2	+1·5	...	...	0	2	2	0	0	0	26	0	1	0	2	0	0	0	0	28	0	1		Parbhani
2·8	...	3·3	0·07	...	0·07	28	0	...	4·7	...	5	0	1	16	5	0	0	0	4	3	5	4	12	6	0	0	0	1		Ramagundam
1·4	+0·2	2·1	1·76	+1·36	1·73	28	2	+1·2	3·3	+0·6	1	1	4	1	1	0	0	0	23	4	3	1	4	2	1	0	1	15		Nizamabad
2·1	+0·3	3·3	0·38	−0·04	0·25	29	1	−0·2	7·6	+1·4	2	3	4	6	3	6	1	6	0	1	8	8	2	2	4	3	3	0		Bidar

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature °F		Vapour pressure, millibars			H h
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Hyderabad, South																				
Gulbarga ...	1,503	960·5	0	955·4	96·8	−2·3	101	5 days	69·6	−0·9	61	28	76·6	94·9	63·3	66·7	13·4	−0·5	10·9	42
Raichur ...	1,311	966·5	−0·3	962·3	96·7	−1·8	102	24	74·0	+0·2	67	26	79·0	95·2	67·8	72·3	18·2	+1·2	16·7	54
Hyderabad (Begumpet) ...	1,778	951·7	+0·3	947·5	94·5	−2·2	100	22,23	67·1	−1·3	59	26	76·4	90·6	66·1	68·4	17·7	0	14·8	58
Hanamkonda ...	881	981·9	−0·1	977·4	93·8	−2·2	99	13,14	70·7	−0·5	62	5	76·5	91·0	68·7	68·3	20·4	−0·2	13·4	67
Khammameth ...	367	999·7	...	995·4	95·6	...	100	13,14	...	...	...	...	78·2	93·3	66·3	75·0	16·7	...	21·4	81
Coastal Andhradesa																				
Nellore ...	66	1009·8	0	1006·1	93·6	−0·7	101	26	73·9	+1·0	66	2	80·9	85·1	74·9	75·9	26·8	0	26·2	73
Ongole ...	38	1011·1	...	1007·2	90·4	...	97	9	74·2	...	67	2	80·5	84·8	75·6	76·1	28·0	...	26·8	79
Masulipatam ...	10	1012·5	+0·3	1008·6	87·3	−3·2	91	8	74·2	+1·9	68	2,4	80·6	83·2	76·8	78·0	29·8	+1·4	30·4	83
Kakinada ...	26	1012·2	+0·3	1008·3	89·7	−2·1	95	12,13	72·9	−0·6	68	4,5	82·2	84·5	74·8	74·9	26·1	−0·5	25·2	69
Visakhapatnam ...	126	1008·5	+0·3	1005·1	85·1	−2·0	87	31	73·4	−1·2	67	4 days	79·6	81·7	72·7	74·8	24·3	−1·0	26·3	71
Calingapatam ...	19	1012·0	+0·2	1008·1	89·1	−3·5	93	8	71·9	−0·9	62	6	75·4	82·7	71·5	76·1	24·6	−1·7	27·8	82
Rentachintala ...	348	1001·4	...	995·4	97·3	−2·1	105	13	73·1	−2·5	64	2,4	79·2	93·4	71·1	71·2	22·4	−1·1	16·1	66
Rayalaseema																				
Cuddapah ...	428	996·9	−0·1	992·2	99·1	−1·8	104	24	76·3	+1·5	68	2	84·4	94·5	73·5	74·9	23·2	+1·0	20·7	57
Bellary ...	1,473	961·1	−0·2	956·6	96·8	−2·7	101	15	73·2	+0·9	67	2,3,4	79·0	95·0	64·3	66·9	14·0	−2·1	9·9	42
Kurnool ...	923	980·0	0	975·1	97·8	−2·2	102	14,24	70·9	−1·1	62	4	79·5	95·1	67·2	68·5	17·2	0	11·8	52
Anantapur ...	1,147	972·0	...	967·2	97·1	...	102	2,3	71·7	...	59	2	80·7	95·3	67·9	69·1	17·5	...	12·4	49
Tamilnad																				
Pamban ...	37	1010·5	−0·2	1006·9	87·8	−0·8	91	25,27	77·8	+1·1	73	27	82·8	84·3	77·0	77·0	29·1	+0·4	28·4	76
Mathurai ...	437	997·1	−0·2	992·5	93·4	−1·9	97	13,25,27	75·0 (a)	+2·5	69	1	82·0	90·7	74·7	73·8	26·1	+1·1	20·8	70
Nagapattinam ...	31	1011·3	+0·1	1007·7	86·2	−2·0	88	24,29,30	78·5	+2·2	71	1	82·2	83·6	76·0	76·8	27·8	+0·1	28·6	74
Tiruchi ..	295	1002·3	−0·5	997·5	93·9	−2·5	97	6 days	74·5	+2·3	67	1	80·3	91·4	74·6	73·7	26·7	+0·1	20·4	75
Coimbatore ...	1,341	966·3	−0·4	961·5	94·3	−1·1	99	14	73·1	+2·9	67	1	77·4	91·6	70·5	70·3	22·4	−1·2	15·6	70
Salem ...	913	980·9	−0·3	975·4	96·5	−1·5	101	26	73·6	+2·2	65	2	78·5	93·2	71·1	72·0	22·7	−1·3	17·2	68
Kallakurichi ...	416	998·1	...	993·0	94·8	...	100	13	72·8	...	67	1,2	79·2	91·5	72·8	71·7	24·6	...	17·6	72
Cuddalore ...	39	1011·0	−0·2	1007·3	87·7	−0·7	89	10 days	74·6	+1·9	68	1	82·3	84·2	76·0	76·7	27·8	−0·2	28·0	74
Vellore ...	703	988·3	+0·4	983·4	94·5	+0·3	100	26	72·0	+2·2	64	2	78·7	91·6	72·2	72·2	24·0	+0·6	18·1	71
Madras ...	51	1010·8	+0·1	1007·1	90·8	−0·6	96	9,26	74·5	+2·1	69	2	81·7	84·3	75·2	75·1	26·9	+0·3	25·6	73
Arogyavaram ...	2,299	934·7	...	930·8	90·7	...	95	13.24,25	67·6	...	58	1	73·9	88·8	66·1	66·3	18·7	...	12·9	66
Malabar And South Kanara																				
Mangalore ...	72	1009·3	−0·2	1005·7	87·8	−1·8	91	4	75·3	−0·4	73	5 days	79·9	84·7	74·2	76·2	26·3	−0·3	27·2	75
Kozhikode ...	27	1010·6	−0·3	1006·8	91·1	+1·0	92	10 days	76·6	+0·5	73	2,3	81·0	88·1	75·2	78·8	27·2	−0·5	29·4	75
Palghat ...	319	1000·8	...	995·6	98·1	...	102	15.19	76·5	...	70	2	81·5	92·9	74·8	77·2	26·4	...	24·8	72
Mysore																				
Chitaldrug ...	2,405	930·2	−0·9	926·5	93·5	−1·4	97	15,20 22	71·2	+0·8	64	2	75·7	92·0	64·4	65·7	16·1	−0·3	10·9	53
Hassan ...	3,149	907·0	...	903·3	90·2	−1·4	93	5 days	64·3 (a)	+1·1	58	2	70·0	87·9	64·5	68·3	18·5	+0·6	15·7	75
Bangalore ...	3,021	911·3	−0·2	907·5	89·5	−0·8	94	24,29	67·6	+3·1	58	2	72·7	86·6	65·2	63·5	18·2	+0·5	10·6	66
Mysore ...	2,518	927·3	−0·4	923·2	91·8	−1·9	95	24,25	69·2	+1·6	62	2	74·4	90·5	67·6	66·9	20·2	+0·5	12·9	70

(a) Mean of 30 days.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.									
0830 hrs. IST	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Hyderabad South,
1·7	+1·0	2·8	0·47	+0·10	0·43	19	1	+0·2	7·5	+1·8	3	5	7	5	3	3	2	3	0	2	3	7	4	4	3	5	3	0	Gulbarga
1·2	+0·2	2·7	0	−0·14	0	...	0	−0·4	6·9	+1·4	1	2	2	13	1	2	3	7	0	1	3	8	13	0	0	3	3	0	Raichur
2·3	+0·9	2·3	0·09	−0·37	0·09	28	0	−0·7	4·9	+1·2	1	1	4	7	0	0	0	1	17	2	5	9	8	1	2	0	3	1	Hyderabad (Begumpet)
2·8	+0·8	2·3	0·17	−0·29	0·15	24	1	+0·2	6·5	+1·3	1	0	0	15	11	1	2	0	1	6	2	2	13	4	1	1	1	1	Hanamkonda
3·7	...	2·3	...	...	...	...	...	...	5·1	...	2	1	4	10	10	1	0	1	2	2	0	5	7	12	2	0	2	1	Khammameth
																													Coastal Andhra desa
2·0	−0·1	1·9	0	−0·17	0	...	0	−0·3	5·1	+0·8	0	0	0	6	11	0	0	0	14	0	0	17	13	1	0	0	0	0	Nellore
3·6	...	2·3	0·01	...	0·01	29	0	...	6·3	...	1	0	0	6	7	5	2	0	10	0	0	8	22	1	0	0	0	0	Ongole
4·1	+1·8	2·1	0·61	+0·19	0·52	26	1	+0·5	6·4	+2·1	3	3	0	8	9	1	0	0	7	0	1	0	21	9	0	0	0	0	Masulipatam
2·3	−0·4	0·9	0·37	−0·11	0·28	28	1	+0·3	5·7	+1·2	1	3	1	8	0	13	0	5	0	0	0	0	24	0	6	0	0	1	Kakinada
2·8	+0·5	2·5	0·26	−0·21	0·26	26	1	+0·2	4·0	−0·1	0	2	2	2	1	1	14	0	9	0	0	2	6	16	5	0	0	2	Visakhapatnam
3·8	+2·1	3·6	1·02	+0·58	0·85	26	2	+1·4	6·7	+0·4	2	1	1	0	2	4	10	11	0	0	0	4	7	11	8	1	0	0	Calingapatam
3·8	+0·7	2·5	1·33	+1·24	1·12	28	2	+1·7	5·2	−0·6	0	1	6	5	8	1	3	0	7	3	0	13	6	5	0	0	1	3	Rentachintala
																													Rayalaseema
1·1	−0·1	2·5	0·08	−0·10	0·08	27	0	−0·3	7·1	−0·5	0	0	11	2	1	1	0	0	16	0	0	19	4	1	0	0	1	6	Cuddapah
2·6	+1·4	3·3	0	−0·21	0	...	0	−0·6	2·7	−0·6	3	0	7	2	1	1	1	4	12	2	4	7	4	0	0	0	4	10	Bellary
1·8	+0·8	2·8	0·22	+0·01	0·18	27	1	+0·6	4·3	+0·4	2	1	4	7	5	3	2	0	7	2	1	5	10	2	0	3	4	4	Kurnool
1·1	...	1·6	0	−0·15	0	...	0	−0·3	6·6	...	0	2	3	7	12	3	2	1	7	1	4	14	2	0	1	1	2	6	Anantapur
																													Tamilnad
3·6	+1·0	3·3	3·18	+1·46	1·45	27	3	+1·6	7·6	+2·1	1	6	8	14	0	2	0	0	0	6	11	6	4	3	0	0	1	0	Pamban
4·0	+0·6	4·2	0·75	+0·05	0·59	17	2	+1·0	3·2	−0·2	8	5	2	1	0	0	0	1	14	1	8	12	2	2	0	0	0	6	Mathurai
4·8	+1·3	3·3	0	−0·79	0	...	0	−1·0	9·3	+3·0	2	6	5	9	0	0	0	2	7	1	5	13	12	0	0	0	0	0	Nagapattinam
3·5	+1·2	3·1	0·32	−0·04	0·32	17	1	+0·3	5·0	+0·3	3	12	5	2	1	1	0	0	7	0	6	17	7	0	0	0	0	1	Tiruchi
2·5	−0·1	2·7	0·06	−0·44	0·06	25	0	−0·9	4·3	+1·8	7	11	4	2	4	3	0	0	0	3	9	9	4	3	2	0	1	0	Coimbatore
2·3	+0·8	2·8	0·22	−0·27	0·11	27,29	2	+1·1	6·3	+1·8	0	1	27	0	0	0	1	0	2	0	1	19	3	0	0	1	0	8	Salem
4·4	...	6·1	4·79	...	2·02	25	3	...	...	...	1	6	1	7	1	2	0	1	12	0	15	0	12	0	0	1	0	3	Kallakurichi
4·0	+1·5	2·1	0	−0·69	0	...	0	−0·6	7·0 (e)	+2·9	1	8	0	6	2	11	0	2	1	0	8	11	11	1	0	0	0	0	Cuddalore
2·6	+0·8	2·2	0·37	+0·10	0·37	24	1	+0·5	5·5	+2·4	0	2	0	3	5	1	0	1	19	0	0	10	15	5	0	0	0	1	Vellore
3·2	+1·1	1·8	0·38	+0·09	0·37	29	1	+0·6	10·1	+0·5	1	1	3	5	5	7	7	2	0	0	1	9	20	0	0	1	0	0	Madras
2·8	...	3·3	0·07	...	0·07	27	0	...	5·2	...	0	0	2	13	12	2	0	1	1	2	9	4	11	3	0	0	2	0	Arogyavaram
																													Malabar And South Kanara
1·5	−0·3	2·5	0	−0·21	0	...	0	−0·3	5·0	+0·1	1	7	17	1	0	0	0	0	5	2	0	0	0	0	1	6	22	0	Mangalore
3·7	+1·6	3·9	0·08	−0·69	0·08	9	0	−0·8	8·0	+1·4	3	15	12	0	0	0	0	1	0	0	0	0	0	0	1	16	14	0	Kozhikode
1·9	...	2·5	0·62	...	0·52	8	2	...	5·1	...	0	1	17	2	0	0	6	2	3	1	0	6	2	0	0	20	2	0	Palghat
																													Mysore
1·7	+0·4	3·1	0	−0·17	0	...	0	−0·4	4·1	+0·2	0	0	1	4	1	3	14	1	7	0	0	15	1	0	0	6	2	7	Chitaldrug
1·6	+0·1	4·7	0	−0·37	0	...	0	−0·6	4·6	+1·4	0	0	3	4	4	6	4	1	9	0	4	12	4	0	1	9	0	1	Hassan
1·6	+0·2	3·3	0	−0·40	0	...	0	−0·8	5·9	+1·4	0	2	4	7	2	6	1	0	9	3	7	10	6	2	1	0	2	0	Bangalore
2·2	+0·2	3·3	0	−0·51	0	...	0	−0·8	5·2	+0·6	0	4	3	5	9	3	4	1	2	3	7	15	1	0	0	1	2	2	Mysore

(e) Mean for 26 days

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relativ humidit %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Highest/Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean (0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Travancore-Cochin																					
Fort Cochin ...	10	1011·2	−0·5	1007·1	87·8	−0·1	91	6	78·3	+0·3	74	8	82·4	85·5	76·7	78·2	28·8	+0·8	29·6	76	+1
Alleppey ...	12	1011·0	...	1007·2	90·4	...	94	20	77·7	...	72	2	84·5	86·9	78·8	79·0	31·0	...	30·3	77	...
Trivandrum ...	211	1004·1	−0·4	1000·8	90·1	...	95	24	76·3	...	72	1,2	79·9	85·5	75·4	76·8	28·0	+0·9	27·5	80	+3
Nagercoil ...	195	1004·8	...	1001·3	93·1	...	97	17,20,25	76·4	...	73	1	82·8	85·7	74·7	76·2	25·7	...	26·6	67	...
Hill Stations Excluding Kashmir																					
Aijal ...	3,599	890·7	...	888·2	72·8	...	83	13	61·2	...	52	21	66·9	68·5	62·8	64·2	17·9	...	18·5	80	...
Shillong ...	4,921	851·1	+0·4	848·5	70·1	−0·3	77	9	49·9	−0·9	42	2	63·3	61·7	51·8	53·6	8·5	−0·8	10·8	43	−2
Cherrapunji ...	4,309	870·6	+0·6	867·8	67·5	−4·2	72	8	53·7	−1·2	48	25	62·8	61·8	54·7	57·6	11·4	−0·8	14·7	60	+2
Darjiling ...	7,432	775·9	−0·1	773·6	56·1	+0·7	62	17	42·7	−0·3	34	26	48·7	47·5	47·1	45·8	10·5	+1·8	10·0	86	+17
Kalimpong ...	3,965	879·8	−0·4	877·4	69·8	−1·6	71	4 days	57·5	−3·1	44	27	57·1	61·7	53·5	55·7	12·7	+0·8	12·7	79	+17
Katmandu ...	4,388	869·0	...	865·5	74·7	−2·7	81	16,17,19	44·8	−0·6	37	29	54·9	65·3	56·4	54·5	10·7	+1·3	9·9	73	+7
Muktesar ...	7,592	771·9	−0·6	770·4	57·1	−2·2	67	10	40·2	−2·4	30	27	47·1	49·5	38·9	42·4	5·3	−0·1	6·7	50	+6
Mussooree ...	6,699	796·7	...	795·3	56·6	−3·1	69	11	42·0	−2·8	31	24	48·5	49·9	40·9	43·5	6·1	+0·1	7·3	55	+7
Simla ...	7,224	781·2	−0·1	780·4	53·0	−4·0	67	11	39·1	−4·5	28	24,27	46·6	48·1	38·5	41·2	5·0	+0·3	6·6	50	+14
Abu ...	3,945	881·0	−0·5	879·6	76·1	−0·6	83	31	58·7	−2·3	52	25	63·7	73·4	49·4	53·0	6·3	−1·3	5·6	32	−3
Pachmarhi ...	3,528	895·2	−0·5	892·5	82·3	−1·8	90	15	57·7	−1·7	48	9	69·9	79·4	55·9	59·9	9·7	+0·1	9·5	40	+3
Mahabaleshwar ...	4,534	863·9	−0·2	862·0	83·6	+1·2	89	14	63·3	+0·7	55	8	67·5	76·5	55·3	63·6	10·0	+1·5	14·3	44	+7
Mercara ...	3,781	886·4	−0·7	883·7	82·9	−1·3	88	29	61·3	−0·3	57	28,29	69·6	79·9	62·0	67·1	15·9	−0·7	17·4	65	−4
Kodaikanal ...	7,688	772·5	−0·3	771·1	65·1	...	69	22,24	50·0	−0·2	43	2	55·9	58·9	48·6	54·1	9·1	+1·2	12·6	61	+15
Ootacamund ...	7,364	781·3	0	779·6	70·8	+0·8	75	4 days	45·2	−2·7	35	2	54·3	64·6	49·6	56·4	10·4	+1·9	12·6	72	+22
Coonoor ...	5,730	827·9	...	...	71·2	−1·7	77	23	51·5	−0·8	47	1	62·8	...	55·7	...	12·6	+1·2	...	67	+12
Tibet																					
Lhasa ...	12,090	623·8	...	...	50·8	...	60	6,7,8	25·1	...	16	1	35·3	...	33·9	...	6·0	...	...	91	...
Gyantse ...	13,110	623·2	...	...	47·9	−1·8	60	11	19·0	+0·6	7	1	35·9	...	27·8	...	2·7	−1·4	...	40	−3
Ceylon																					
Colombo ...	24	1010·6	−0·3	1007·3	89·3	−1·6	89	8 days	75·0	+0·8	72	17	79·1	86·8 (a)	76·1	80,6	29·4	+1·5	32·9	87	0
Trincomalee ...	24	1011·1	+0·7	1008·0	85·4	−2·6	88	24,26	77·5	+1·4	73	2,11	80·9	83·3	76·6	76·8	29·3	+0·8	28·5	81	−2
Hambantota ...	61	1008·7	−0·8	1005·6	87·1	−0·2	93	31	75·1	+1·1	72	31	80·6	83·9	76·3	77·9	29·0	+2·2	29·9	81	−3
Mannar ...	12	1011·6	...	1007·8	89·6	...	93	4 days	76·3	...	72	11	79·6	85·9	75·9	77·2	28·9	...	27·9	84	...

(a) Mean of 30 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Travancore–Cochin
4·7	+2·7	4·8	1·23	−0·78	0·72	8	3	+0·2	6·5	+1·0	2	18	9	1	0	0	0	0	1	0	0	1	0	0	4	20	6	0	Fort Cochin
3·4	...	3·1	0·89	...	0·30	21	3	...	5·8	...	0	13	11	4	0	1	1	0	1	0	0	0	0	0	3	15	13	0	Alleppey
3·0	+0·8	5·2	3·28	+1·74	0·84	7	2	−0·5	4·1	+0·3	7	13	5	0	0	0	0	2	4	0	0	1	1	5	18	5	1	0	Trivandrum
3·9	...	6·0	1·00	...	0·25	29	6	...	5·7	...	2	16	3	0	0	0	0	3	7	1	5	4	3	2	9	5	2	0	Nagercoi
																													Hill Stations Excluding Kashmir
1·9	...	2·1	4·06	...	1·31	23	6	...	4·7	...	1	1	4	6	2	14	1	3	2	0	0	1	2	0	16	5	5	2	Aijal
2·7	+0·8	4·5	3·07	+1·10	0·76	23	6	+2·1	3·8	−0·4	0	0	0	0	1	14	6	7	3	0	0	0	0	1	11	3	1	15	Shillong
2·7	−0·3	2·8	8·27	+1·00	2·80	14	9	+1·9	8·2	+1·6	3	1	4	4	3	11	4	0	1	1	2	0	0	2	20	6	0	0	Cherrapunji
4·0	+1·0	5·2	3·61	+1·73	1·34	23	7	+3·3	6·9	+1·9	0	0	17	5	0	0	8	0	1	0	0	2	1	0	7	21	0	0	Darjiling
2·7	+0·9	3·1	1·46	+0·35	0·59	26	5	+2·0	7·3	−0·4	2	0	0	2	0	0	1	26	0	0	0	1	24	2	0	0	4	0	Kalimpong
3·9	+0·9	3·7	1·88	+1·29	0·68	23	6	+4·3	6·9	−0·5	3	0	2	2	0	0	0	1	23	1	0	2	1	1	1	1	2	22	Katmandu
2·7	+0·1	4·2	3·30	+1·40	1·31	23	7	+2·9	3·6	−2·7	0	10	9	0	0	2	6	2	2	0	5	3	0	0	6	13	3	1	Muktesar
3·7	+0·7	5·0	3·96	+1·70	1·21	22	9	+5·3	...	...	8	8	1	0	3	2	1	1	7	7	5	0	3	9	1	0	1	5	Mussooree
3·7	+0 5	5·3	4·14	+1·78	1·13	22	10	−5·3	2·2	−1·8	1	2	1	8	6	1	0	0	12	1	1	1	4	10	6	0	2	6	Simla
1·7	+0·2	3·2	0·04	−0·13	0·04	26	0	−0·5	4·0	−1·1	2	1	1	1	2	3	1	2	18	3	1	0	0	5	6	6	4	6	Abu
2·6	+1·0	2·9	0·55	−0·01	0·49	2	1	−0·3	2·5	−1·0	2	3	2	4	8	3	1	3	5	5	3	1	0	2	0	3	9	8	Pachmarhi
1·5	+0·8	1·6	0	−0·17	0	...	0	−0·4	6·7	+0·1	2	17	3	2	0	0	0	7	0	2	1	0	0	0	1	10	17	0	Mahabaleshwar
3·9	+1·3	2·7	0	−0·76	0	...	0	−1·6	4·2	+1·1	14	15	1	0	0	0	0	1	0	9	9	0	0	0	0	13	0	0	Mercara
2·7	+1·0	5·0	1·16	−0·65	0·54	27	4	+0·9	8·2	0	4	12	4	6	2	0	0	2	1	4	6	2	10	4	0	0	1	4	Kodaikanal
2·3	+0·6	4·5	0·07	−1·21	0·06	8	0	−2·6	1·3	−2·0	1	1	5	6	0	0	2	0	0	5	2	9	1	0	0	0	0	14	Ootacamund
3·5	+1·3	...	2·87	−0·37	2·02	17	2	−0·8	3·6	+0·1	7	5	1	8	6	3	0	1	0	...	...	...	...	...	...	...	...	...	Coonoor
																													Tibet
1·3	...	...	0·23	...	0·20	20	1	...	1·2	...	0	0	0	0	0	0	0	0	31	...	...	...	...	...	...	...	...	...	Lhasa
2·3	+0·9	...	0	−0·13	0	0	0	−0·5	4·9	−0·3	0	0	6	8	2	2	0	0	13	...	...	...	...	...	...	...	...	...	Gyantse
																													Ceylon
4·2	+0·5	5·7	7·64	+3·36	1·80	6	8	+1·9	...	...	0	11	8	4	1	1	0	0	6	2	2	1	0	0	3	17	5	1	Colombo
5·0	+2·0	4·4	0·75	−1·21	0·33	17	3	+0·3	..	..	3	5	5	2	3	4	1	0	8	1	14	12	3	0	0	0	0	1	Trincomalee
4·8	+1·8	5·8	0·61	−2·85	0·38	4	2	−3·0	...	...	20	2	1	4	0	0	4	0	0	2	9	12	1	5	1	0	0	1	Hambantota
3·1	...	4·3	1·49	...	1·09	7	3	...	...	...	1	6	9	10	3	0	2	0	0	11	6	3	2	0	4	3	2	0	Mannar

TABLE *III*.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 4TH CLASS STATIONS— MARCH 1950

STATION	Maximum temperature, °F				Minimum temperature, °F				Mean dry bulb temperature 0830 hrs. I.S.T. °F	Mean wet bulb temperature 0830 hrs. I.S.T. °F	Vapour pressure millibars		Relative humidity %		Mean cloud amount, 0830 hrs. I.S.T.	Rainfall, inches				Number of rainy days (0,10″or more)		Wind	
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 0830 hrs. I.S.T.	Departure from normal	Mean 0830 hrs. I.S.T.	Departure from normal		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Resultant direction 0830 hrs. I.S.T.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Assam																							
Lumding ...	88·4	+2·2	96	9	...	...	...	...	...	66·7	...	...	...	-21	...	13·8	-0·42	0·58	25	4	-0·3	...	
Jammu and Kashmir																							
Jammu ...	76·5	-2·4	87	11	53·1	-6·1	45	22,24	59·9	53·1	10·8	+0·4	62	+10	3·9	4·30	-2·27	2·48	22	6	+2·3	...	
Kargil (R) ...																							
Mysore																							
Balehonnur ...	88·3	+0·8	92	14	62·8	0	59	3,28	68·2	64·7	19·4	+1·0	83	+4	...	0	-1·24	0	...	0	-1·8	...	
Sikkim ...																							
Lachen ...	..	...	...	...	41·0	...	34	9	47·1	...	...	...	...	...	...	2·44	...	0·33	12	12	...	...	
Tibet																							
Yatung (Chumbi)	55·4	+3·8	62	8, 23, 29	22·3	-5·2	13	31	29·8	28·3	4·8	-1·2	85	+1	3·5	4·68	-2·62	0·64	19	16	+10·6	...	

(R) Register not received

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 5TH CLASS STATIONS— MARCH 1950

Division	Station	Rainfall, inches				Number of rainy days (0,10″ or more)		Division	Station	Rainfall, inches				Number rainy (0.10″ or
		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal			Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Assam ...	Mawsynram ...	7·26	...	2·95	14	7	...	Jammu & Kashmir	Sonamarg ...	2·92	-10·49	0·62	22	8
West Bengal ...	Bankura ...	0·84	-0·25	0·70	26	2	+0·1		Gurez * ...	...	...	...	...	...
Bihar ...	Muzaffarpur ...	0·75	+0·37	0·60	23	2	+1·1	Deccan (Desh) ...	Khandala ...	0	0	0	...	0
	Chapra ...	0·47	+0·11	0·41	26	1	+0·1	Tamilnad ...	Palayamcottai ...	2·17	+1·13	1·60	28	3
	Arrah ...	0·36	-0·02	0·16	5	2	+1·1	Sikkim ...	Thangu ...	0·71	...	0·12	20,26	2
Punjab (I) ...	Dalhousie ...	8·46	+4·59	2·56	23	9	+3·1		Lachung ..	5·08	+0·06	1·00	16	11
	Kyelang ...	0	-3·84	0	...	0	-7·5		Chungthang ...	9·50	...	1·88	16	18
	Gondla ...	11·72	...	4·18	21	14	...							
	Koksar ...	15·04	...	3·10	3	16	...							
	Kothi ..	5·66	...	0·89	21	13	...							
	Dharampore ...	3·56	+1·67	1·25	22	9	+6·1							
	Kharsali ...	5·78	...	3·00	23	5	...							
	Rana ...	6·51	...	2·30	22	8	...							
	Jamuna Chetty ...	5·24	...	2·22	22	8	...							

(*) Data not reliable.

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Note:— Data upto 9·0 Km. a.s.l. are given under Table A and data above 9·0 Km. under Table B.

In tables A & B

n represents the number of observations.

V represents the mean wind speed in m/second irrespective of direction.

v represents the resultant mean velocity in m/second.

D represents the direction of resultant mean wind in degrees East of North.

For the co-ordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Report-January 1950.

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MARCH 1950

STATION	AHMEDABAD												ALLAHABAD										
Time in I.S.T.	0230				0730				1430				0230				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	1·9	1·2	319	31	1·2	0·7	9	31	2·4	1·2	276	31	1·9	0·7	300	31	1·5	0·2	128	31	3·2	2·1
0·15 a.g. ...	31	9·3	5·9	338	31	7·8	3·4	33	30	4·5	2·5	287	31	8·3	3·9	336	31	6·9	1·5	346	31	5·2	3·5
0·6 a.s.l. ...	31	6·6	4·4	332	31	8·3	3·5	39	30	3·9	2·4	286	31	8·4	4·4	322	31	8·6	3·5	340	31	5·1	3·6
1·0 ,, ...	31	5·3	2·8	297	31	6·6	2·0	353	31	4·2	2·4	293	31	7·4	4·6	305	31	7·5	4·1	304	31	5·8	4·2
1·5 ,, ...	31	5·9	3·5	249	31	6·2	3·3	275	31	4·6	2·8	277	30	7·7	6·3	287	31	7·8	6·2	291	31	6·9	5·7
2·0 ,, ...	31	7·5	5·2	244	29	7·6	5·7	260	31	6·0	4·4	269	28	9·5	8·4	279	31	9·2	8·1	284	31	8·6	7·9
2·5 ,, ...	30	9·1	7·3	250	29	9·6	7·6	260	31	9·0	7·7	264	26	11·4	10·1	277	31	10·5	9·5	282	31	10·2	9·4
3·0 ,, ...	28	10·7	8·9	254	30	11·5	9·4	253	30	11·7	9·9	260	22	11·2	9·9	269	30	12·8	11·4	282	30	12·2	11·0
4·0 ,, ...	10	10·2	8·5	258	28	12·6	11·6	261	29	14·8	13·2	263	10	15·1	14·7	283	23	15·5	13·6	278	27	14·6	13·7
5·0 ,, ...	3	15·5	13·7	263	16	12·4	11·2	274	26	17·5	16·1	267	2	16·0	15·9	272	10	14·7	13·8	283	26	17·4	16·1
6·0 ,, ...	2	17·0	16·3	290	13	17·0	15·1	277	21	21·1	19·5	275					9	18·7	17·8	269	23	21·9	20·2
7·5 ,, ...					7	23·5	21·9	284	11	24·9	22·7	289									16	28·8	25·6
9·0 ,, ...					1	16·0	16·0	290	8	30·6	28·8	293									4	31·0	30·3

STATION	AMBALA												ANANTAPUR								ASANSOL		
Time in I.S.T.	0230				0730				1430				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	2·8	1·5	352	31	2·1	1·1	341	31	3·7	0·8	318	31	1·8	1·0	200	31	2·6	1·9	66	30	1·7	0·8
0·15 a.g. ...	30	9·3	6·3	349	31	7·8	4·0	349	31	8·0	2·9	304	31	4·8	2·5	179	31	3·4	2·0	67	30	5·3	2·4
0·6 a.s.l. ...	30	9·5	6·2	347	31	9·0	4·4	346	31	7·9	2·5	319	31	5·3	2·7	183	31	3·3	1·5	65	30	5·9	3·3
1·0 ,, ...	30	8·3	5·0	326	31	8·1	4·5	334	31	6·8	1·7	300	31	6·0	2·9	168	31	3·1	1·2	71	30	6·0	4·7
1·5 ,, ...	29	7·8	4·3	299	31	7·0	4·0	319	31	6·8	2·1	282	31	5·9	2·0	148	31	3·2	1·3	66	30	7·4	6·3
2·0 ,, ...	29	7·1	3·1	282	31	6·7	3·5	292	30	6·7	2·8	286	31	5·0	1·1	65	31	3·4	1·3	78	19	7·0	6·0
2·5 ,, ...	29	6·9	4·1	266	30	7·0	3·5	278	30	7·3	4·2	280	31	4·6	3·0	34	31	4·0	1·7	70	5	8·4	8·2
3·0 ,, ...	26	7·2	4·5	252	29	7·7	4·9	279	28	8·5	5·2	266	31	5·3	2·5	42	31	5·0	1·6	55	5	9·1	8·5
4·0 ,, ...	1	6·5	6·5	185	27	10·9	7·6	269	24	8·5	5·9	265	31	6·5	1·8	55	30	6·5	1·9	6			
5·0 ,, ...					16	12·7	10·8	261	16	11·6	10·1	269	29	7·2	2·6	297	30	6·7	3·8	297			
6·0 ,, ...					7	16·4	14·1	262	12	15·6	14·2	269	28	9·5	5·1	318	28	9·1	5·3	299			
7·5 ,, ...					1	18·5	18·5	275	11	24·8	22·5	276	20	11·3	9·0	292	27	12·2	8·1	296			
9·0 ,, ...									5	33·7	29·1	285	13	16·4	12·2	279	26	16·3	12·3	287			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MARCH 1950

STATION	ASANSOL												BANGALORE											
Time in I.S.T.	0730				1100				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·5	1·3	296	30	1·8	1·1	302	30	2·2	1·8	296	31	3·3	2·6	128	31	2·1	1·3	151	31	3·0	2·1	86
0·15 a.g. ...	30	4·2	2·2	303	30	3·1	1·8	319	29	3·5	2·9	293	25	7·2	5·3	136	31	4·9	3·2	167	30	3·7	2·7	72
0·6 a.s.l. ...	30	5·3	3·3	318	30	3·5	2·4	313	30	4·4	3·3	299	...	...	...	...	...	...	...	...	...	...	...	...
1·0 ,, ...	30	6·6	5·2	306	30	4·7	3·7	305	30	4·7	3·3	294	27	5·8	4·3	134	31	3·5	2·2	161	30	3·4	2·5	78
1·5 ,, ...	30	7·1	6·2	292	28	6·5	5·4	286	30	5·1	4·2	284	23	7·5	4·1	154	30	5·7	3·1	171	30	3·0	2·1	66
2·0 ,, ...	28	9·1	8·0	287	23	7·4	6·4	277	30	7·1	6·1	287	27	4·7	1·4	147	30	4·6	1·9	81	30	3·3	2·4	61
2·5 , ...	26	10·0	8·7	289	15	8·8	8·1	278	28	9·7	9·2	292	23	4·0	2·3	25	30	5·0	3·6	43	31	3·8	2·5	63
3·0 ,, ...	16	10·5	9·6	297	11	9·3	8·8	284	27	12·0	11·4	291	20	5·0	3·3	30	30	6·0	4·3	45	29	4·9	2·8	75
4·0 ,, ...	6	13·0	12·7	291					20	14·1	13·5	297					29	6·9	3·1	66	22	4·9	0·8	99
5·0 ,, ...	2	17·2	16·0	275					13	16·6	16·1	281					29	6·3	1·4	14	20	5·9	1·6	316
6·0 ,, ...									7	21·5	20·2	279					26	7·3	3·5	331	16	7·6	4·3	315
7·5 ,, ...									2	23·7	21·9	283					24	9·7	6·8	304	11	10·6	6·7	288
9·0 ,, ...									1	32·0	32·0	275					16	14·0	10·5	304	9	16·7	12·1	275

STATION	BAREILLY								BHOPAL												BHUJ			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·4	0·8	352	31	3·2	1·4	303	31	3·1	1·1	64	31	2·6	1·2	88	31	2·8	1·5	227	31	1·2	0·9	261
0·15 a.g. ...	31	7·9	4·0	343	31	6·0	3·5	301	31	8·9	3·7	52	31	7·7	3·2	92	31	4·1	1·7	231	31	7·4	5·9	314
0·6 a.s.l. ...	31	9·0	5·4	328	31	6·3	3·1	302	31	7·6	2·9	60	31	6·6	2·7	94	31	4·0	1·9	237	31	8·7	6·4	321
1·0 ,, ...	31	8·7	5·4	318	31	6·1	3·8	302	30	9·4	2·7	52	31	8·1	1·8	94	31	4·1	2·1	254	31	6·0	2·9	325
1·5 ,, ...	31	7·8	5·3	308	31	7·2	5·5	296	29	7·8	2·3	272	31	7·3	1·0	267	31	4·7	2·7	251	31	5·9	2·1	272
2·0 ,, ...	31	8·0	6·4	295	30	7·8	6·3	284	27	7·2	4·7	258	31	6·7	4·9	267	31	5·3	4·0	262	30	6·5	3·7	258
2·5 ,, ...	30	8·8	6·7	291	30	8·3	7·0	273	23	8·6	7·3	258	31	8·0	6·7	259	31	7·0	5·5	269	25	7·9	6·7	254
3·0 ,, ...	25	9·4	7·7	282	29	9·2	8·1	264	20	10·9	9·8	267	29	9·2	8·2	259	31	8·9	7·9	269	20	9·3	8·2	253
4·0 ,, ...	21	12·3	10·4	274	25	12·7	11·4	273	7	13·1	12·4	278	20	14·5	13·4	271	27	14·1	12·7	269	10	11·2	10·2	268
5·0 ,, ...	8	16·1	13·7	277	22	17·4	16·0	273	4	14·5	13·9	284	15	15·9	14·6	281	20	16·9	15·8	273	4	15·7	14·9	273
6·0 ,, ...	2	17·0	16·9	270	14	20·7	17·0	268					8	19·9	19·4	288	16	20·1	18·6	279	2	22·7	22·1	310
7·5 ,, ...					3	22·8	17·7	288					2	20·7	20·7	291	4	28·1	26·8	275				
9·0 ,, ...					1	36·0	36·0	250									1	31·0	31·0	280				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MARCH 1950

STATION	BHUJ								BIKANER								BOMBAY							
Time in I.S.T.	0730				1430				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	31	0·5	0·5	255	31	2·2	0·7	310	31	1·7	0·8	97	31	2·2	0·6	288	31	0·8	0·6	327	31	0·6	0·4	
0·15 a. g. ...	31	5·6	3·6	318	31	4·1	1·7	300	31	7·3	4·3	93	31	3·8	1·3	288	31	4·4	3·5	333	31	3·7	2·7	
0·6 a.s.l. ...	31	8·8	5·1	341	31	4·3	2·1	296	31	7·7	3·4	66	31	4·1	1·5	303	31	5·3	4·6	348	30	5·4	4·6	
1·0 ,, ...	31	7·1	3·3	351	31	3·9	1·9	301	31	5·3	2·0	7	31	4·4	1·2	290	31	5·3	4·4	346	30	5·2	4·1	
1·5 ,, ...	30	5·9	2·3	308	31	4·9	2·3	287	31	5·5	3·0	309	31	4·5	1·8	275	30	5·1	4·0	328	31	5·4	3·9	3
2·0 ,, ...	29	6·9	4·8	276	31	5·6	3·8	269	30	6·7	4·4	287	31	5·3	3·3	263	29	4·8	2·4	293	29	5·7	2·7	2
2·5 ,, ...	28	7·7	5·7	266	31	8·3	9·2	267	30	8·1	6·2	274	30	7·7	6·6	263	25	6·3	2·2	217	29	6·1	2·9	2
3·0 ,, ...	27	9·2	7·9	267	31	10·6	8·7	267	30	10·2	8·5	267	29	10·3	9·4	261	23	7·2	3·0	187	29	7·0	3·0	2
4·0 ,, ...	23	12·7	11·5	268	27	13·3	11·9	266	24	12·7	10·8	273	24	14·8	12·9	269	7	7·4	3·9	263	26	8·0	5·9	2
5·0 ,, ...	20	15·7	13·5	269	24	17·0	15·8	268	19	15·3	13·9	261	17	18·4	16·9	272	1	17·0	17·0	290	24	11·0	9·1	2
6·0 ,, ...	14	18·1	13·9	272	21	20·1	18·1	271	7	18·7	17·6	249	10	18·5	15·5	280					18	14·6	13·2	2
7·5 ,, ...	8	17·7	15·9	258	12	21·9	20·2	271	1	22·5	22·5	300	2	28·0	28·0	295					7	17·3	15·9	2
9·0 ,, ...	3	19·3	14·2	286	4	24·1	21·1	275													1	4·0	4·0	3

STATION	BOMBAY				CALCUTTA												COCHIN (Willingdon Island)			
Time in I.S.T.	1430				0230				0730				1100				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	.v	
Surface ...	31	6·1	5·6	291	31	2·5	1·7	231	31	2·0	1·0	248	30	3·0	1·6	274	31	3·2	1·6	279	31	1·3	0·5	
0·15 a. g. ...	31	4·7	4·3	302	31	6·0	4·2	238	31	4·7	2·4	267	30	4·4	2·2	282	31	4·0	1·8	272	30	2·8	1·1	
0·6 a.s.l. ...	31	3·5	2·6	339	31	7·8	5·8	248	31	5·7	3·7	289	30	4·2	2·6	309	31	4·0	2·5	278	30	2·6	1·5	3
1·0 ,, ...	31	3·6	1·7	344	31	6·9	4·6	267	31	5·8	4·1	299	30	4·8	3·4	290	31	4·2	3·1	284	24	2·5	1·1	
1·5 ,, ...	31	4·3	1·6	302	30	7·3	5·6	280	31	6·1	5·1	293	29	6·1	5·0	290	31	4·8	4·0	292	18	3·8	3·0	
2·0 ,, ...	31	5·5	2·7	258	27	7·5	6·1	287	31	7·8	7·0	292	27	8·1	7·2	289	31	6·6	5·8	290	13	5·1	4·6	
2·5 ,, ...	31	6·3	3·8	242	23	8·8	7·5	298	29	8·5	7·7	290	21	9·2	8·6	292	31	9·0	7·8	292	9	6·2	5·7	
3·0 ,, ...	31	7·0	4·2	243	20	10·4	8·8	295	26	8·8	8·1	287	17	9·9	9·2	300	31	9·6	8·4	291	7	5·6	5·1	
4·0 ,, ...	31	8·1	4·8	272					12	9·8	9·0	275	1	13·0	13·0	255	28	12·5	11·6	293	4	3·6	2·5	1
5·0 ,, ...	30	10·1	8·2	285					3	10·3	9·5	270					22	15·3	14·2	286				
6·0 ,, ...	29	14·8	13·0	282													18	17·6	16·5	276				
7·5 ,, ...	24	20·1	17·2	290													4	25·0	23·3	278				
9·0 ,, ...	14	25·3	21·8	286													2	27·3	27·0	274				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MARCH 1950

STATION	COCHIN (Willingdon Island)								COOCHBEHAR								CUTTACK							
Time in I.S.T.	0730				1430				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	0·8	0·8	42	31	4·3	3·9	270	31	1·8	1·4	82	31	1·6	0·9	223	31	0·7	0·6	231	31	0·5	0·1	263
0·15 a.g. ...	31	3·0	2·6	35	31	4·8	4·4	263	31	6·5	5·3	85	22	3·3	1·6	241	30	5·0	4·1	235	31	3·7	1·8	262
0·6 a.s.l. ...	31	2·7	1·8	346	31	2·5	1·4	281	31	6·3	4·5	99	22	3·5	2·0	229	30	7·2	5·7	233	31	4·6	2·8	241
1·0 ,, ...	31	2·7	0·9	27	31	2·6	1·3	50	30	4·8	1·2	117	22	3·9	2·7	225	30	6·2	4·2	244	30	5·1	2·0	272
1·5 ,, ...	30	3·7	2·6	52	31	4·9	4·1	61	29	5·7	2·5	260	22	5·7	4·8	248	30	6·0	3·9	281	30	4·7	2·6	310
2·0 ,, ...	28	5·3	4·5	64	30	6·9	6·0	62	28	6·7	5·3	273	21	7·8	6·6	255	30	6·8	4·6	297	29	5·7	3·1	313
2·5 ,, ...	26	6·0	4·9	67	29	7·7	6·9	63	25	8·1	6·7	276	21	11·3	10·1	267	20	7·7	5·3	303	29	6·8	4·0	302
3·0 ,, ...	25	5·9	4·4	73	25	6·3	5·5	72	24	11·7	10·6	275	18	14·5	13·3	274	16	8·2	5·7	302	28	8·2	5·4	296
4·0 ,, ...	22	5·4	3·6	81	21	5·1	3·7	85	19	13·1	11·9	279	10	13·2	12·9	273	7	11·0	10·0	284	21	8·5	7·4	280
5·0 ,, ...	18	6·3	4·2	72	19	6·4	4·7	79	11	13·5	11·8	285	6	17·0	15·1	275					17	11·9	10·4	275
6·0 ,, ...	16	5·4	3·4	45	16	6·5	4·1	42	8	15·1	13·6	291	3	15·8	14·6	288					15	15·1	12·9	278
7·5 ,, ...	6	11·0	6·5	269	11	9·4	3·7	347	3	19·5	19·2	298	2	20·0	18·8	307					3	19·5	19·3	244
9·0 ,, ...	4	12·6	11·1	233	8	14·1	5·6	257													1	28·0	28·0	255

STATION	CUTTACK								DEOLALI				DIBRUGARH								GADAG			
Time in I.S.T.	1100				1430				0730				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·0	0·2	247	31	1·2	0·1	133	18	0·6	0·5	266	31	2·3	1·9	58	31	2·5	1·8	66	31	3·6	2·3	248
0·15 a.g. ...	31	3·3	0·9	270	31	3·3	0·7	158	18	3·1	1·3	252	24	4·2	3·8	53	30	2·7	2·0	62	31	7·7	3·0	299
0·6 a.s.l. ...	31	4·6	1·2	284	31	3·1	0·9	216	18	1·7	1·1	243	24	4·9	4·2	60	29	2·4	1·5	84	...	...	...	..
1·0 ,, ...	31	4·8	1·4	310	31	3·2	1·5	240	18	5·2	2·3	350	24	4·6	3·2	72	29	2·9	1·7	123	31	8·0	2·6	333
1·5 ,, ...	31	4·2	2·0	308	31	3·9	1·9	271	18	6·2	2·0	335	23	3·2	1·4	167	27	4·2	2·8	211	30	5·8	1·5	50
2·0 ,, ...	26	4·9	2·5	289	30	5·3	3·8	287	18	7·3	4·0	285	21	3·7	2·5	207	27	5·7	4·9	223	30	4·7	1·7	99
2·5 ,, ...	15	6·2	4·0	282	29	6·5	5·5	294	18	8·4	5·6	258	20	5·1	4·0	233	27	6·9	6·3	229	30	4·6	1·9	106
3·0 ,, ...	11	7·1	5·5	282	27	7·8	6·8	295	17	8·1	5·8	242	17	6·2	5·5	246	22	6·6	6·0	228	30	4·3	1·5	94
4·0 ,, ...					25	10·4	9·2	290	15	9·3	7·6	240	11	8·0	5·6	262	19	9·4	8·8	246	23	5·7	1·1	306
5·0 ,, ...					23	13·9	12·4	284	15	12·7	11·6	266	3	10·2	8·8	251	12	12·5	11·5	262	10	6·2	3·1	303
6·0 ,, ...					19	15·5	14·0	282	14	18·3	16·3	278	3	13·7	11·7	254	8	13·6	12·3	276	5	11·7	7·4	296
7·5 ,, ...					15	22·5	21·2	273	7	21·6	21·0	276	1	17·0	17·0	255	5	16·3	15·6	290				
9·0 ,, ..					9	25·2	23·2	278	1	22·0	22·0	300					3	22·3	20·1	290				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MARCH 1950

STATION	GADAG								GAYA															
Time in I.S.T.	0730				1430				0230				0730				1100				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	31	2·7	0·6	240	31	2·9	0·7	101	31	1·7	1·1	178	31	2·5	1·3	178	30	3·4	1·6	245	31	4·3	3·9	2
0·15 a.g. ...	31	6·2	0·8	27	31	4·0	0·8	66	31	5·5	2·5	267	31	5·0	2·3	251	30	5·0	2·7	264	31	5·9	5·2	2
0·6 a.s.l. ...	...	...	...	...	...	...	...	...	31	6·7	4·2	296	31	6·8	4·3	312	30	5·0	2·5	271	31	6·3	5·7	2
1·0 ,, ...	31	7·1	2·7	50	31	3·5	0·7	83	31	6·9	5·8	293	31	6·5	5·3	299	30	5·9	4·3	284	31	6·2	5·6	2
1·5 ,, ...	31	6·4	1·9	39	31	3·8	0·9	75	31	7·8	7·3	286	31	7·7	7·1	286	29	7·5	6·7	282	31	7·2	6·5	2
2·0 ,, ...	31	4·4	0·8	57	31	4·3	1·1	70	30	8·8	8·2	285	31	8·8	8·1	284	29	9·1	8·2	282	30	9·1	8·5	2
2·5 ,, ...	31	4·3	0·5	146	31	4·3	1·0	38	21	9·9	9·5	286	29	9·2	8·3	283	22	10·4	9·4	286	30	11·0	10·5	2
3·0 ,, ...	31	5·0	0·9	95	30	5·0	0·3	72	17	11·4	10·8	280	26	10·6	9·6	286	17	12·1	11·1	284	29	12·7	12·2	2
4·0 ,, ...	30	6·2	0·5	314	29	5·9	1·1	325					14	13·2	12·7	279					29	15·8	15·2	2
5·0 ,, ...	29	7·3	3·9	299	22	8·4	4·4	306					3	16·3	16·2	263					22	18·7	17·5	2
6·0 ,, ...	27	9·7	5·9	305	19	10·0	6·6	298					1	15·0	15·0	266					16	21·6	20·5	2
7·5 ,, ...	22	11·9	8·9	293	9	13·5	10·2	273													3	37·0	35·5	2
9·0 ,, ...	12	13·7	10·7	291	5	21·8	21·5	253																

STATION	GOPALPUR								GORAKHPUR								HYDERABAD (Dn)							
Time in I.S.T.	0730				1430				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	31	2·7	1·3	276	31	4·6	3·3	167	31	1·9	0·7	267	31	2·4	1·6	270	31	1·9	1·6	113	31	1·4	0·7	1
0·15 a.g. ...	31	4·5	2·5	236	31	6·1	4·4	157	31	5·9	1·8	301	31	5·1	3·6	283	31	7·2	6·0	127	31	5·1	3·5	1
0·6 a.s.l. ...	31	3·6	2·5	209	31	4·1	1·6	153	31	7·5	4·6	311	31	5·4	4·0	280	31	4·9	4·1	115	31	3·3	2·2	1
1·0 ,, ...	29	4·1	0·7	215	31	3·8	0·3	225	31	6·7	5·2	307	31	5·6	4·5	279	31	8·8	6·5	134	31	8·2	4·9	1
1·5 ,, ...	29	5·0	1·2	349	31	4·6	1·2	313	31	7·0	6·2	294	31	6·8	6·1	282	31	6·8	2·4	125	29	7·7	2·9	1
2·0 ,, ...	29	5·8	2·4	344	29	6·2	2·6	317	30	9·0	7·8	281	31	9·2	8·5	290	31	7·2	0·9	265	29	6·5	0·4	2
2·5 ,, ...	28	6·1	3·1	319	27	6·5	4·1	313	27	9·5	8·1	276	29	10·3	9·7	292	31	7·2	3·8	282	28	6·2	3·1	3
3·0 ,, ...	28	7·0	4·0	313	27	6·7	5·0	295	23	10·8	9·9	276	28	12·1	11·3	289	30	6·9	4·2	290	28	5·9	2·6	3
4·0 ,, ...	24	7·9	5·5	294	25	8·6	6·9	289	17	12·0	11·2	287	26	14·4	13·6	287	6	10·5	8·6	291	28	6·5	2·6	3
5·0 ,, ...	15	8·3	7·0	281	20	11·3	9·8	293	9	12·1	11·9	283	18	15·8	14·7	287	1	12·0	12·0	315	27	8·5	5·5	2
6·0 ,, ...	14	11·4	9·7	283	19	15·1	13·5	278	3	15·4	15·3	283	16	18·3	17·7	286					27	11·4	8·2	2
7·5 ,, ...	9	15·1	13·3	264	8	15·9	14·0	258					9	23·4	20·6	282					11	13·5	11·9	2
9·0 ,, ...	3	21·4	21·1	248	6	21·3	19·7	253					2	28·7	27·7	270					2	24·0	24·0	2

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MARCH 1950

STATION	HYDERABAD (Dn.)				JAGDALPUR												JAMSHEDPUR							
Time in I.S.T.	1430				0230				0730				1430				0730				1100			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·0	1·1	108	31	1·1	0·7	121	31	0·6	0·2	102	31	2·0	0·9	238	31	1·4	1·3	276	30	2·3	1·6	317
0·15 a. g. ...	31	4·8	1·9	112	31	4·9	2·0	141	31	3·3	1·5	183	31	3·7	0·8	239	31	2·8	2·3	278	30	3·3	2·4	299
0·6 a.s.l. ...	31	4·4	1·4	110	31	3·9	1·7	141	31	1·9	0·7	181	31	3·2	0·7	236	31	4·8	2·3	305	30	3·6	2·5	289
1·0 ,, ...	31	4·5	1·8	129	31	5·3	1·7	164	31	5·0	2·2	185	31	3·8	1·1	243	31	5·6	3·1	303	30	5·3	3·7	289
1·5 ,, ...	31	4·3	1·7	127	30	4·9	0·4	221	30	5·5	1·1	180	31	4·3	1·6	253	31	6·5	4·7	290	30	6·5	5·2	288
2·0 ,, ...	31	4·5	1·0	136	30	5·1	1·7	280	30	5·5	1·1	284	31	4·6	1·3	288	31	7·6	6·1	287	28	7·8	6·8	287
2·5 ,, ...	30	5·0	0·9	299	30	6·3	3·3	276	29	6·7	2·1	303	30	5·3	1·7	295	30	8·7	7·1	287	19	8·6	7·7	286
3·0 ,, ...	29	6·0	2·1	289	30	7·8	5·4	287	29	7·2	4·1	295	30	5·7	2·8	283	30	10·4	9·0	291	16	11·1	10·7	292
4·0 ,, ...	26	8·0	3·4	270	20	8·9	7·1	288	27	8·2	6·1	293	26	7·2	5·0	279	18	11·5	10·9	299				
5·0 ,, ...	22	9·1	5·5	274	10	11·5	10·6	282	26	9·7	7·8	288	22	10·1	8·4	291	12	14·5	13·7	285				
6·0 ,, ...	20	11·4	8·4	288	3	17·7	14·1	304	19	12·9	10·8	289	20	14·0	11·8	286	8	15·9	15·0	271				
7·5 ,, ...	19	16·3	13·2	288					14	14·5	12·5	275	15	18·9	17·1	287								
9·0 ,, ...	17	18·2	14·7	285					6	16·8	15·1	276	13	21·5	19·9	287								

STATION	JAMSHEDPUR				JHARSUGUDA												JODHPUR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·4	1·6	303	31	0·9	0·5	7	31	1·1	0·9	20	31	0·9	0·5	268	31	3·7	3·1	37	31	3·0	2·0	47
0·15 a. g. ...	31	3·5	2·3	306	31	4·7	1·9	5	30	4·1	2·8	39	31	2·9	1·6	267	31	8·7	5·6	46	31	6·9	3·8	73
0·6 a.s.l. ...	31	3·1	2·3	290	31	5·6	0·6	337	30	5·1	0·9	19	31	2·6	1·5	272	31	8·3	4·3	50	31	7·4	2·7	66
1·0 ,, ...	31	3·6	2·8	279	31	6·0	1·3	272	30	5·6	1·6	284	31	3·6	1·7	282	31	6·1	1·7	32	31	6·2	0·8	5
1·5 ,, ...	31	5·0	4·2	280	30	5·1	2·4	274	30	5·1	2·6	285	31	4·1	2·2	276	31	5·8	2·7	241	31	6·4	3·0	277
2·0 ,, ...	30	6·6	5·8	283	30	6·2	4·2	281	29	6·1	4·5	295	31	6·0	4·3	288	31	7·7	4·7	246	31	7·7	6·1	272
2·5 ,, ...	30	8·1	7·3	284	26	7·1	5·3	283	29	7·9	6·3	302	31	4·8	6·2	292	28	9·3	7·0	259	30	8·9	7·0	266
3·0 ,, ...	29	10·3	9·4	286	20	8·3	6·6	299	28	9·7	7·9	302	30	9·5	7·6	290	27	11·1	10·0	224	27	9·1	6·5	273
4·0 ,, ...	25	12·9	12·0	289	8	9·0	8·7	294	22	11·1	10·0	295	25	11·4	10·2	286	10	14·9	13·3	278	23	12·8	11·3	267
5·0 ,, ...	22	15·8	14·7	284					14	12·5	11·0	266	20	13·5	11·6	275	4	17·0	15·5	269	16	15·8	14·5	266
6·0 ,, ...	11	18·6	17·6	271					6	16·2	14·3	267	16	18·0	16·6	273					8	17·5	14·9	271
7·5 ,, ...	3	27·2	26·6	267					3	22·0	20·0	260	8	25·3	23·5	263					6	17·7	14·7	267
9·0 ,, ...									2	30·0	28·4	248									4	17·4	15·2	287

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MARCH 1950

STATION	JODHPUR				JABALPUR												MADHOSAGAR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·6	1·1	288	31	1·1	0·4	118	31	0·9	0·6	120	31	1·1	0·6	331	31	1·9	0·3	252	31	1·2	0·1	271
0·15 a.g. ...	31	5·1	2·0	280	31	5·8	2·6	97	31	5·2	2·2	119	31	3·3	1·5	333	31	6·8	2·5	38	31	4·8	0·9	55
0·6 a.s.l. ...	31	5·4	1·8	280	31	6·3	2·5	90	31	5·7	2·3	111	31	3·5	1·5	333	31	7·5	3·2	29	31	7·3	2·7	42
1·0 ,, ...	31	5·5	1·9	302	31	5·3	0·4	334	31	6·1	0·8	98	31	3·7	1·7	310	31	7·1	2·7	9	31	6·8	1·8	29
1·5 ,, ...	30	5·7	1·8	283	31	5·3	2·9	265	31	5·4	1·8	264	31	4·1	2·4	283	31	6·7	3·9	292	31	6·6	2·0	281
2·0 ,, ...	30	6·2	3·2	272	31	6·8	5·5	267	31	6·5	4·3	261	31	5·0	3·4	269	31	8·2	6·7	275	31	7·9	5·8	271
2·5 ,, ...	30	7·7	5·3	261	27	9·0	7·7	271	31	7·8	6·2	266	31	7·1	5·6	267	27	9·7	8·9	267	31	9·3	7·8	271
3·0 ,, ...	29	9·5	8·0	260	21	11·1	8·9	273	31	10·2	8·8	271	31	9·7	8·4	269	22	11·0	10·4	274	30	10·9	9·7	271
4·0 ,, ...	27	14·1	13·0	265	2	14·3	13·7	288	26	14·3	12·4	276	29	14·4	12·9	273	2	11·5	11·3	271	26	15·1	14·0	272
5·0 ,, ...	24	19·5	17·3	265					15	15·0	13·5	281	27	17·3	15·4	276					21	17·0	15·6	275
6·0 ,, ...	21	22·2	20·1	267					2	17·0	16·4	267	23	20·2	18·4	276					16	19·8	18·5	280
7·5 ,, ...	11	24·7	22·4	265					1	22·0	22·0	245	19	25·2	22·9	274					6	25·0	24·6	271
9·0 ,, ...	2	35·2	33·2	245									5	32·1	31·2	281								

STATION	MADHOSAGAR				MADRAS												MALEGAON							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·0	1·4	329	31	1·5	1·0	192	31	2·0	1·5	242	31	4·9	4·1	118	31	2·5	1·8	235	31	2·0	1·5	288
0·15 a.g. ...	31	4·2	1·6	318	31	4·5	3·6	150	31	4·0	2·5	202	31	5·1	4·4	124	31	5·6	3·4	309	31	4·8	2·0	326
0·6 a.s.l. ...	31	4·7	2·1	333	31	5·8	4·9	151	31	5·4	4·4	165	31	4·1	2·4	145	31	5·6	3·4	309	31	4·8	2·0	326
1·0 ,, ...	31	4·6	2·3	305	31	5·0	3·8	150	31	5·3	4·2	156	30	3·9	1·4	151	31	6·5	4·3	335	31	5·7	2·3	30
1·5 ,, ...	31	4·5	3·1	284	30	4·3	1·8	128	31	5·4	2·7	115	30	4·2	0·9	86	31	6·6	3·9	331	31	5·3	1·6	40
2·0 ,, ...	31	5·4	4·0	273	29	4·6	1·9	70	30	5·3	2·8	83	31	4·9	2·1	62	31	6·1	1·9	374	31	6·0	1·6	271
2·5 ,, ...	31	8·4	6·6	371	29	5·4	2·8	40	30	5·8	3·5	59	31	5·4	2·7	69	30	6·4	2·9	241	31	6·9	3·5	261
3·0 ,, ...	31	11·1	9·4	268	28	5·5	2·6	27	30	5·7	4·0	46	31	6·1	3·4	58	29	6·8	3·7	238	30	7·0	4·7	254
4·0 ,, ...	29	15·3	13·8	269	23	5·3	2·2	25	29	5·5	2·6	48	31	6·0	1·9	46	25	10·8	7·0	236	27	9·2	6·8	256
5·0 ,, ...	26	18·8	17·2	269					27	6·1	2·5	33	31	6·4	2·1	352					23	11·1	9·5	269
6·0 ,, ...	23	23·0	21·3	271					25	7·4	3·4	346	31	7·9	4·3	340					19	13·3	11·5	275
7·5 ,, ...	15	26·9	25·6	277					18	9·7	6·0	289	30	9·5	6·7	303					9	17·5	13·4	280
9·0 ,, ...	10	30·5	28·2	279					9	14·2	8·7	264	27	14·2	9·6	293					3	21·3	16·3	272

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MARCH 1950

STATION	MALEGAON				MANGALORE												MASULIPATAM							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·5	1·0	284	31	1·9	1·6	25	31	2·0	1·8	91	31	4·2	3·6	269	31	1·3	0·9	139	31	1·5	0·7	141
0·15 a.g. ...	31	3·7	2·0	263	31	4·0	3·6	357	31	3·6	2·7	45	31	5·1	4·5	277	31	4·6	3·9	156	31	3·9	2·4	151
0·6 a.s.l. ...	31	3·7	3·0	263	31	3·9	3·5	337	31	3·6	1·9	357	31	3·2	1·5	285	31	5·2	4·5	160	31	5·5	4·7	158
1·0 ,, ...	31	3·3	2·0	265	31	3·9	2·5	329	31	4·8	2·1	10	31	3·3	1·3	3	31	4·9	3·0	150	31	5·2	4·2	148
1·5 ,, ...	31	3·4	2·1	267	30	5·3	2·9	334	31	5·5	3·2	348	31	3·9	2·7	44	30	5·3	2·1	106	31	5·3	2·7	129
2·0 ,, ...	31	3·7	2·4	267	29	5·5	2·2	22	31	4·6	2·0	33	31	4·9	3·8	62	29	5·6	1·5	85	26	6·0	1·7	70
2·5 ,, ...	30	4·1	2·6	256	23	6·2	3·7	69	30	4·7	3·1	71	30	5·8	4·4	76	27	5·7	0·5	53	23	5·9	1·7	29
3·0 ,, ...	30	5·6	4·0	256	15	6·1	4·7	83	30	4·9	3·6	80	29	5·9	4·5	89	27	5·9	1·0	314	20	7·1	2·7	359
4·0 ,, ...	28	9·4	8·2	259	7	5·8	2·5	86	30	5·4	2·9	95	29	6·6	2·7	78	13	6·3	3·0	324	19	5·7	2·5	347
5·0 ,, ...	26	11·1	9·7	273					30	6·3	2·3	44	27	6·7	2·7	27					15	6·6	4·1	323
6·0 ,, ...	24	16·2	14·3	275					26	7·8	3·4	9	27	7·9	3·5	5					12	10·0	5·9	296
7·5 ,, ...	17	20·9	18·7	277					18	9·4	6·0	297	19	9·2	6·5	302					7	9·9	7·3	301
9·0 ,, ...	11	26·8	22·7	276					14	15·8	9·8	295	15	10·8	7·4	284					4	14·5	9·9	251

STATION	MASULIPATAM				MINICOY												NAGERCOIL							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·5	3·2	138	31	1·9	1·6	335	31	2·2	1·9	352	30	3·3	3·0	340	31	2·3	1·3	13	31	2·0	1·6	29
0·15 a.g. ...	31	4·9	4·0	144	31	3·5	2·7	342	31	4·2	3·6	351	30	4·7	4·4	359	31	5·1	2·6	6	31	4·8	3·5	37
0·6 a.s.l. ...	31	4·2	2·2	163	31	3·3	1·9	9	31	4·1	3·0	10	30	4·2	3·8	12	31	4·8	2·9	22	31	5·2	4·1	40
1·0 ,, ...	31	5·2	2·0	146	31	3·9	2·3	78	30	4·3	3·1	52	28	4·4	3·5	48	31	5·6	4·6	51	31	5·7	5·1	51
1·5 ,, ...	31	6·5	1·6	129	30	6·1	5·4	87	27	6·2	5·2	80	26	5·3	4·7	75	31	6·7	6·3	64	31	6·9	6·4	61
2·0 ,, ...	29	7·0	1·7	74	28	7·5	6·9	81	26	6·7	6·3	87	25	5·9	5·4	73	30	8·0	7·6	66	31	7·8	7·1	67
2·5 ,, ...	29	7·2	2·5	45	24	7·3	7·0	79	23	6·5	6·0	83	25	5·9	4·8	75	26	7·4	6·8	70	30	7·9	6·9	66
3·0 ,, ...	29	7·2	2·5	19	20	5·7	5·1	80	20	4·6	3·3	83	25	5·1	4·2	80	24	6·8	5·9	75	30	7·0	5·7	65
4·0 ,, ...	27	6·1	2·3	357					16	4·8	2·6	110	22	6·0	4·3	86	7	6·0	4·4	78	29	5·9	4·7	79
5·0 ,, ...	23	6·8	3·3	320					13	5·2	2·5	67	19	7·9	6·8	75	1	4·5	4·5	4	24	7·0	5·3	68
6·0 ,, ...	17	11·3	7·0	299					10	8·5	6·3	51	17	7·9	6·7	56	1	7·0	7·0	350	23	7·6	5·3	45
7·5 ,, ...	14	13·7	10·8	289					7	11·9	5·9	18	14	10·8	5·6	23					19	8·0	4·8	13
9·0 , ...	9	14·8	12·6	284					3	12·5	1·7	190	8	10·4	3·8	277					13	8·4	4·4	305

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MARCH 1950

STATION	NAGERCOIL				NAGPUR												NEW DELHI							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	4·5	1·5	116	31	1·8	1·1	13	31	1·7	1·2	52	31	2·1	0·3	252	31	2·7	1·9	357	31	2·4	0·7	31
0·15 a. g. ...	31	7·8	2·8	111	31	5·3	3·4	88	31	4·8	3·8	57	31	2·5	0·5	173	31	8·8	5·8	10	31	6·8	3·3	
0·6 a.s.l. ...	31	7·3	3·3	72	31	5·7	3·4	109	31	5·9	3·7	97	31	3·0	0·6	181	31	8·3	4·8	2	31	7·7	3·8	35
1·0 ,, ...	31	6·1	4·3	51	31	5·9	2·9	150	31	6·2	2·9	125	31	3·2	0·8	192	31	7·1	4·3	332	31	7·9	4·0	32
1·5 ,, ...	29	6·7	6·3	37	31	5·8	2·8	183	31	5·9	2·0	193	31	4·0	1·5	224	31	7·7	5·3	287	31	8·1	4·9	29
2·0 ,, ...	27	8·1	7·6	42	29	5·1	2·5	215	31	5·5	2·8	238	30	4·9	2·7	255	29	8·7	6·5	281	31	8·1	5·8	28
2·5 ,, ...	27	7·9	7·5	58	24	4·7	2·4	268	30	5·9	3·3	260	29	6·2	4·1	266	22	9·5	8·3	271	31	8·2	6·1	28
3·0 ,, ...	25	7·4	6·8	57	23	6·6	4·7	273	28	7·1	5·2	278	26	7·4	5·5	275	13	9·5	8·6	258	31	9·1	7·8	27
4·0 ,, ...	22	7·4	5·9	75	12	12·1	10·7	267	23	9·5	7·8	291	23	10·4	8·3	277	4	11·4	11·0	270	22	12·0	11·0	26
5·0 ,, ...	18	7·7	6·7	74	6	15·7	15·1	287	20	12·6	9·8	281	22	14·0	12·2	279	1	18·0	18·0	241	13	16·8	15·3	26
6·0 ,, ...	15	9·6	8·4	68	1	22·0	22·0	320	17	13·2	10·9	273	19	17·0	14·8	275					6	16·8	16·0	26
7·5 ,, ...	10	10·1	7·6	37					11	19·1	16·5	280	17	21·4	19·5	278					2	23·7	23·6	27
9·0 ,, ...	8	10·5	8·0	14					7	22·2	19·7	286	10	23·9	23·0	281								

STATION	NEW DELHI				POONA												PORT BLAIR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	31	4·5	2·3	330	31	2·1	1·7	259	31	1·7	1·6	246	31	3·4	1·3	326	31	1·0	0·6	3	31	1·3	1·1	
0·15 a. g. ...	31	5·7	2·7	338	31	3·6	3·2	294	31	2·2	1·4	270	31	4·1	1·8	294	31	3·5	3·1	34	30	3·9	3·7	
0·6 a.s.l. ...	31	5·8	2·6	330	31	2·7	2·3	247	31	2·1	1·9	233	31	3·4	1·3	303	31	3·9	3·4	43	27	5·3	4·7	
1·0 ,, ...	31	6·0	2·6	301	31	6·0	5·3	316	31	5·3	2·2	9	31	3·2	1·2	290	31	4·5	3·1	57	28	5·0	4·1	
1·5 ,, ...	31	6·0	3·2	284	31	6·3	3·4	328	31	6·8	2·3	21	31	3·0	1·6	288	28	5·3	3·1	76	24	5·4	3·8	
2·0 ,, ...	30	7·3	4·5	273	31	5·6	0·6	284	31	5·7	0·7	311	31	3·7	1·9	260	19	5·5	3·8	99	24	6·3	4·6	
2·5 ,, ...	30	8·3	6·0	272	31	5·6	1·9	168	31	5·3	1·6	226	31	4·3	2·8	242	9	5·7	3·6	99	24	6·1	4·5	
3·0 ,, ...	27	11·3	9·0	270	26	5·3	2·4	165	31	5·5	2·3	230	31	5·4	3·1	245	8	5·5	4·6	87	24	5·6	4·2	
4·0 ,, ...	23	12·8	11·3	277	23	6·7	3·8	260	30	8·0	4·5	260	30	6·8	4·4	272	2	2·3	2·3	54	18	4·1	2·5	
5·0 ,, ...	20	16·5	15·3	270	3	11·5	10·6	324	29	10·7	8·2	279	30	9·4	7·7	283					18	4·4	1·2	
6·0 ,, ...	17	18·9	17·6	272	3	13·7	13·4	307	27	12·6	10·3	279	29	13·5	11·3	280					17	5·6	0·7	
7·5 ,, ...	12	24·5	23·1	280					17	17·1	15·8	278	24	18·0	15·6	291					7	8·8	3·1	
9·0 ,, ...	6	32·3	31·6	284					8	20·4	17·4	273	20	20·7	18·7	284					2	5·7	3·7	

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MARCH 1950

STATION	PORT BLAIR				RAIPUR												SAHARSA							
Time in I.S.T.	1430				0230				0730				1430				0730				1100			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·4	2·2	75	31	1·9	0·6	93	31	1·9	0·8	30	31	1·3	0·2	159	31	0·9	0·2	40	30	2·1	0·9	280
0·15 a.g. ...	31	4·2	3·9	67	27	5·2	1·5	74	30	5·1	2·1	68	30	2·7	0·6	302	31	6·2	1·8	280	30	4·2	1·9	280
0·6 a.s.l. ...	31	4·3	3·6	46	27	5·2	1·7	87	30	5·6	2·0	83	30	3·1	0·9	295	31	8·2	4·8	291	30	5·1	2·8	280
1·0 ,, ...	31	4·0	2·9	42	26	4·2	1·3	100	29	5·3	0·9	124	30	3·0	0·6	251	31	8·0	6·2	293	30	7·2	5·6	276
1·5 ,, ...	31	4·7	3·1	64	26	4·6	0·9	274	29	4·8	1·7	223	29	3·7	1·4	256	30	9·0	8·4	291	28	7·0	6·0	283
2·0 ,, ...	31	5·8	4·3	80	26	5·2	2·5	263	29	5·1	2·5	264	28	5·4	3·0	268	29	10·3	9·7	290	23	8·6	7·4	282
2·5 ,, ...	28	6·4	4·9	80	24	6·2	3·5	285	29	6·8	4·1	283	28	7·7	4·7	295	21	9·7	9·1	290	17	10·0	7·9	279
3·0 ,, ...	25	5·5	3·6	83	22	9·0	6·7	291	27	8·6	5·4	299	27	8·1	5·7	298	19	11·4	11·0	284	17	10·7	9·6	283
4·0 ,, ...	21	4·1	1·7	82	3	9·5	8·6	287	23	10·7	8·9	289	27	9·7	8·1	286	14	14·9	14·4	285				
5·0 ,, ...	20	4·5	1·0	60	1	15·0	15·0	250	19	12·6	10·5	287	25	13·4	11·7	283	5	17·0	16·8	290				
6·0 ,, ...	18	5·3	1·5	342					15	15·9	13·0	278	20	15·1	13·4	282	1	16·5	16·5	295				
7·5 ,, ...	18	8·1	3·9	277					8	17·3	14·8	268	15	21·3	19·5	279	1	17 5	17·5	280				
9·0 ,, ...	18	13·3	9·3	260					3	27·5	26·2	259	7	26·6	25·2	284								

STATION	SAHARSA				TEZPUR												TIRUCHIRAPALLI			
Time in I.S.T.	1430				0230				0730				1100				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·1	2·7	276	31	2·0	1·7	53	31	1·9	1·8	65	28	2·3	1·8	90	31	1·9	0·7	117	31	0·7	0·7	50
0·15 a.g. ...	31	5·9	5·0	282	24	5·7	4·9	75	31	7·3	7·0	77	28	5·5	5·0	84	31	4·7	1·4	98	31	4·4	3·0	101
0·6 a.s.l. ...	31	6·4	5·8	280	24	5·6	2·6	121	31	7·1	5·9	91	28	6·2	5·1	93	31	3·9	0·5	122	31	6·3	4·6	117
1·0 ,, ...	31	6·7	6·3	277	24	4·8	1·9	221	30	4·4	2·1	113	26	4·3	2·1	125	31	3·6	2·0	231	29	5·9	4·3	118
1·5 ,, ...	31	8·4	7·9	281	21	5·7	4·4	255	28	4·2	2·0	247	24	4·9	3·3	230	31	5·9	5·3	245	25	5·5	3·7	95
2·0 ,, ...	30	11·1	10·4	281	20	7·3	6·8	261	27	5·8	5·0	257	20	6·7	6·1	249	30	8·7	8·4	246	24	5·1	3·5	65
2·5 ,, ...	29	12·5	11·8	287	19	9·0	8·6	258	23	6·8	6·3	258	13	7·8	7·5	259	30	10·4	10·2	248	21	6·1	4·1	56
3·0 ,, ...	29	13·8	13·3	285	17	10·7	10·1	254	22	9·9	9·6	258	10	8·0	7·5	259	27	10·9	10·5	252	19	6·9	4·6	55
4·0 ,, ...	25	16·5	16·2	285	5	10·1	9·1	261	13	12·0	10·8	259					20	12·5	12·2	260				
5·0 ,, ...	15	18·3	17·3	281					10	14·1	12·8	268					18	17·2	16·3	268				
6·0 ,, ...	8	20·8	20·2	285					5	13·9	13·7	252					15	18·8	16·7	274				
7·5 ,, ...	1	31·5	31·5	295					1	27·5	27·5	265					9	23·1	22·2	293				
9·0 ,, ...																	5	27·8	26·0	288				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MARCH 1950

STATION	TIRUCHIRAPALLI								TRIVANDRUM				UDAIPUR											
Time in I.S.T.	0730				1430				0730				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	0·9	0·7	28	31	1·5	1·3	69	31	0·9	0·8	32	31	0·6	0·4	287	31	0·5	0·3	303	31	3·1	1·1	261
0·15 a. g. ...	31	3·5	1·9	46	31	3·4	3·1	82	31	3·1	2·3	3	31	4·5	2·4	342	28	3·4	1·8	347	29	5·2	2·3	260
0·6 a.s l. ...	31	4·8	2·6	120	31	3·2	2·8	97	31	3·1	1·8	329												
1·0 ,, ...	31	4·6	2·9	123	31	3·6	2·9	99	31	2·9	1·3	17	31	5·7	2·4	340	29	5·8	1·6	38	29	4·9	2·4	264
1·5 ,, ...	31	4·3	3·0	88	31	4·3	3·1	80	31	3·8	3·1	66	31	6·5	2·1	305	31	6·7	1·1	305	31	4·2	2·7	260
2·0 ,, ...	31	5·2	4·4	68	30	5·3	4·6	61	31	5·4	4·4	67	31	7·1	4·7	264	31	7·6	4·5	268	31	5·0	3·9	260
2·5 ,, ...	30	6·1	5·1	60	30	5·9	5·1	61	31	5·9	4·7	63	30	8·9	6·9	251	30	9·5	7·6	263	31	6·9	5·9	262
3·0 ,, ...	29	6·7	5·3	58	27	5·9	5·1	63	30	6·1	4·7	69	28	9·9	8·1	251	29	11·1	9·3	261	31	9·9	8·9	260
4·0 ,, ...	27	5·4	3·8	70	26	6·0	3·8	70	25	5·5	3·7	90	6	8·7	8·6	279	22	12·3	10·4	265	29	15·4	13·8	261
5·0 ,, ...	25	5·9	3·2	58	25	6·6	3·5	52	21	6·8	5·2	64	2	10·7	10·1	279	13	14·7	12·9	268	26	18·2	16·4	268
6·0 ,, ...	22	7·1	3·7	23	23	6·8	3·1	29	19	8·3	4·5	40	1	29·0	29·0	260	10	16·5	14·2	280	24	22·9	21·9	268
7·5 ,, ...	16	9·1	5·1	298	17	9·6	5·5	318	13	9·1	4·3	7					2	19·5	17·7	285	12	23·5	22·4	276
9·0 ,, ...	8	14·1	10·8	266	10	14·4	9·3	272	7	13·4	4·1	277									5	28·2	27·4	298

STATION	VENGURLA												VERAVAL											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	0·8	0·7	360	31	0·3	0·3	360	31	4·4	4·1	268	31	4·7	4·3	332	31	3·2	2·8	347	31	6·5	5·6	274
0·15 a. g. ...	31	4·9	4·7	358	31	3·8	2·7	19	31	5·0	4·5	279	31	8·5	8·0	325	31	8·3	7·0	347	31	6·9	5·1	263
0·6 a.s.l. ...	31	7·1	6·7	349	31	6·5	5·0	358	31	3·6	1·9	327	31	6·5	5·7	326	30	7·7	5·8	350	31	4·6	2·6	317
1·0 ,, ...	31	8·0	7·1	337	31	7·0	5·2	2	31	3·9	1·7	2	31	5·0	2·8	310	30	5·9	3·5	335	31	4·2	2·4	330
1·5 ,, ...	31	5·8	3·2	317	31	6·8	3·1	346	31	4·6	1·3	17	31	4·9	1·7	271	30	5·8	3·3	261	31	5·1	2·9	295
2·0 ,, ...	31	5·2	1·0	133	31	5·4	0·5	345	31	4·5	0·9	107	31	6·2	3·9	244	29	7·0	4·5	251	31	7·0	4·5	267
2·5 ,, ...	29	6·0	3·1	122	31	5·2	1·2	147	30	5·5	1·8	117	30	7·0	5·1	250	29	8·1	5·8	249	31	8·0	5·4	258
3·0 ,, ...	28	6·3	3·4	124	31	5·5	2·1	162	30	6·2	1·4	113	30	7·9	5·8	259	28	8·2	5·8	253	31	9·0	5·8	259
4·0 ,, ...	12	4·6	1·4	7	27	6·1	1·3	284	30	6·1	1·7	306	20	8·3	6·3	262	26	8·8	7·0	265	30	11·2	9·3	273
5·0 ,, ...	6	6·8	6·1	293	26	7·1	4·3	304	30	7·6	5·0	299					24	12·6	11·1	272	27	13·7	12·6	276
6·0 ,, ...	5	9·9	9·5	295	24	11·0	8·0	301	29	11·5	8·5	300					19	15·4	13·7	282	24	17·6	16·3	277
7·5 ,, ...	2	9·3	9·3	283	14	11·7	8·5	289	24	13·1	10·2	277					11	18·5	17·0	276	17	22·5	21·6	287
9·0 ,, ...					6	14·8	10·8	293	16	16·4	13·8	277					2	13·5	12·7	267	4	23·4	22·3	306

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MARCH 1950

STATION	VISAKHAPATNAM											
Time in I.S.T.	0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	0·6	0·2	215	31	0·1	0·1	180	31	4·4	3·6	157
0·15 a. g. ...	31	3·3	1·7	226	31	2·5	1·4	355	31	5·1	3·8	160
0·6 a.s.l. ...	30	3·9	1·4	223	31	3·7	1·4	215	31	3·6	1·5	167
1·0 ,, ...	28	3·9	0·7	175	28	4·2	1·2	177	30	3·1	0·5	210
1·5 ,, ...	28	3·8	0·2	138	26	5·1	1·1	105	30	5·2	0·7	64
2·0 ,, ...	23	4·8	1·4	21	24	5·9	1·2	60	29	6·5	1·4	338
2·5 ,, ...	20	5·5	1·5	317	20	6·4	2·4	12	27	7·1	2·3	337
3·0 ,, ...	17	5·2	1·7	302	19	6·8	2·5	323	27	6·0	2·6	321
4·0 ,, ...	12	6·9	4·5	270	17	6·4	3·5	314	25	6·7	4·1	300
5·0 ,, ...					13	9·6	6·6	303	21	7·6	5·3	299
6·0 ,, ...					7	10·2	6·7	284	21	10·5	7·9	282
7·5 ,, ...					2	16·3	15·9	246	18	16·5	12·6	276
9·0 ,, ...									6	17·9	16·3	287

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

MARCH 1950

Height in Km.	n	V	v	D
		AHMEDABAD		
10	5	27·4	24·7	276
11	3	35·2	33·1	277
		ALLAHABAD		
10	2	27·0	24·7	275
		AMBALA		
10	2	29·3	23·0	297
11	1	14·5	14·5	345
12	1	17·0	17·0	295
		ANANTAPUR		
10	32	18·7	14·4	279
11	25	21·8	19·0	272
12	17	23·6	20·6	260
13	10	23·2	19·5	256
14	8	22·6	20·4	252
15	5	16·2	15·3	259
16	4	10·0	7·9	237
17	2	7·7	2·9	209
		BANGALORE		
10	15	18·2	12·4	280
11	5	24·0	18·6	246
12	3	17·2	14·9	264
13	2	17·7	14·9	298
14	2	17·0	16·3	279
		BHOPAL		
10	1	33·5	33·5	270
		BHUJ		
10	5	23·6	18·4	289
11	3	27·7	24·6	290
		BOMBAY		
10	8	24·4	22·7	269
11	2	29·4	27·7	240
12	2	29·5	29·4	237
		CALCUTTA		
10	2	33·3	33·3	268
11	1	36·0·	36·0	270
		COCHIN (Willingdon Island)		
10	9	14·4	9·1	234
11	5	20·5	18·7	229
12	5	21·4	17·2	239
13	3	22·8	22·5	227
14	2	25·5	25·3	232
15	2	21·7	21·3	233

Height in Km.	n	V	v	D
		COCHIN (Willingdon Island) *(Contd.)*		
16	1	24·5	24·5	230
17	1	14·5	14·5	230
18	1	31·0	31·0	240
19	1	9·0	9·0	290
20	1	4·0	4·0	335
		CUTTACK		
10	6	33·9	25·4	274
11	2	20·5	19·7	300
12	1	37·5	37·5	280
		DEOLALI		
10	1	26·5	26·5	305
		DIBRUGARH		
10	3	31·2	30·5	288
11	1	58·0	58·0	270
		GADAG		
10	14	21·6	16·6	272
11	2	29·2	28·7	251
12	2	32·7	31·5	259
		GOPALPUR		
10	5	27·5	24·2	248
11	3	28·8	26·8	259
		HYDERABAD (Dn.)		
10	15	20·3	16·4	279
11	8	24·1	19·4	278
12	5	28·2	23·5	277
13	3	36·8	36·4	288
14	2	37·5	37·0	286
		JAGDALPUR		
10	14	22·7	19·7	279
11	9	24·7	21·8	277
12	4	21·0	20·8	253
13	3	27·0	22·5	254
14	2	13·7	9·8	252
15	2	8·5	5·5	244
16	2	5·0	4·3	295
17	2	4·0	2·8	13
18	2	3·3	2·5	37
		JODHPUR		
10	1	15·0	15·0	275
		JABALPUR		
10	2	29·7	26·6	270

Height in Km.	n	V	v	D
		MADHOSAGAR		
10	6	32·3	27·5	277
11	4	40·3	31·9	276
		MADRAS		
10	36	16·2	11·1	275
11	26	19·3	15·4	267
12	20	20·1	15·7	261
13	15	20·9	16·9	265
14	12	21·0	18·4	255
15	7	19·4	16·5	236
16	7	19·0	13·0	242
17	4	17·5	11·1	237
18	3	19·7	5·2	153
19	3	21·5	14·8	177
20	2	17·5	13·3	99
21	2	19·0	18·9	126
22	1	27·5	27·5	130
23	1	10·0	10·0	130
		MALEGAON		
10	7	25·1	19·3	281
11	5	21·7	17·5	286
12	2	18·5	18·5	296
13	1	9·5	9·5	265
14	1	20·0	20·0	305
		MANGALORE		
10	23	15·6	10·8	285
11	7	17·2	14·0	272
12	5	20·0	17·4	265
13	3	24·8	23·2	255
		MASULIPATAM		
10	9	18·3	14·7	278
11	5	21·8	17·3	282
12	5	23·3	20·0	269
13	5	28·4	24·2	269
14	3	20·8	20·6	257
15	3	17·2	16·7	260
16	1	14·5	14·5	290
17	1	8·0	8·0	305
18	1	7·0	7·0	330
		MINICOY		
10	9	9·2	0·9	195
11	6	8·7	4·5	240
12	4	12·7	5·7	222

Height in Km.	n	V	v	
		MINICOY *(Contd.)*		
13	4	15·3	9·0	26
14	3	17·0	14·8	24
15	2	16·7	15·6	24
16	2	14·0	13·5	22
17	1	13·0	13·0	30
		NAGERCOIL		
10	17	9·6	3·8	31
11	5	9·6	0·1	29
12	2	7·3	3·7	14
13	1	10·0	10·0	11
14	1	15·0	15·0	11
15	1	15·5	15·5	12
16	1	22·5	22·5	13
17	1	31·0	31·0	12
18	1	5·0	5·0	12
		NAGPUR		
10	11	25·8	23·2	27
11	7	30·0	29·2	27
12	3	35·7	35·5	27
13	3	39·5	39·0	26
14	2	33·5	33·3	27
15	2	32·0	31·7	26
16	2	28·5	28·1	27
17	1	68·0	68·0	27
18	1	61·0	61·0	28
19	1	63·5	63·5	27
20	1	70·0	70·0	28
		NEW DELHI		
10	4	41·1	40·7	28
11	2	54·5	53·5	27
		POONA		
10	19	25·0	21·1	28
11	12	31·0	26·7	28
12	6	32·3	30·3	30
13	3	21·2	18·6	29
14	2	23·0	21·7	26
15	1	27·0	27·0	28
		PORT BLAIR		
10	19	14·0	10·9	24
11	16	16·1	13·3	24
12	16	16·6	13·8	25
13	16	15·9	13·9	24

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

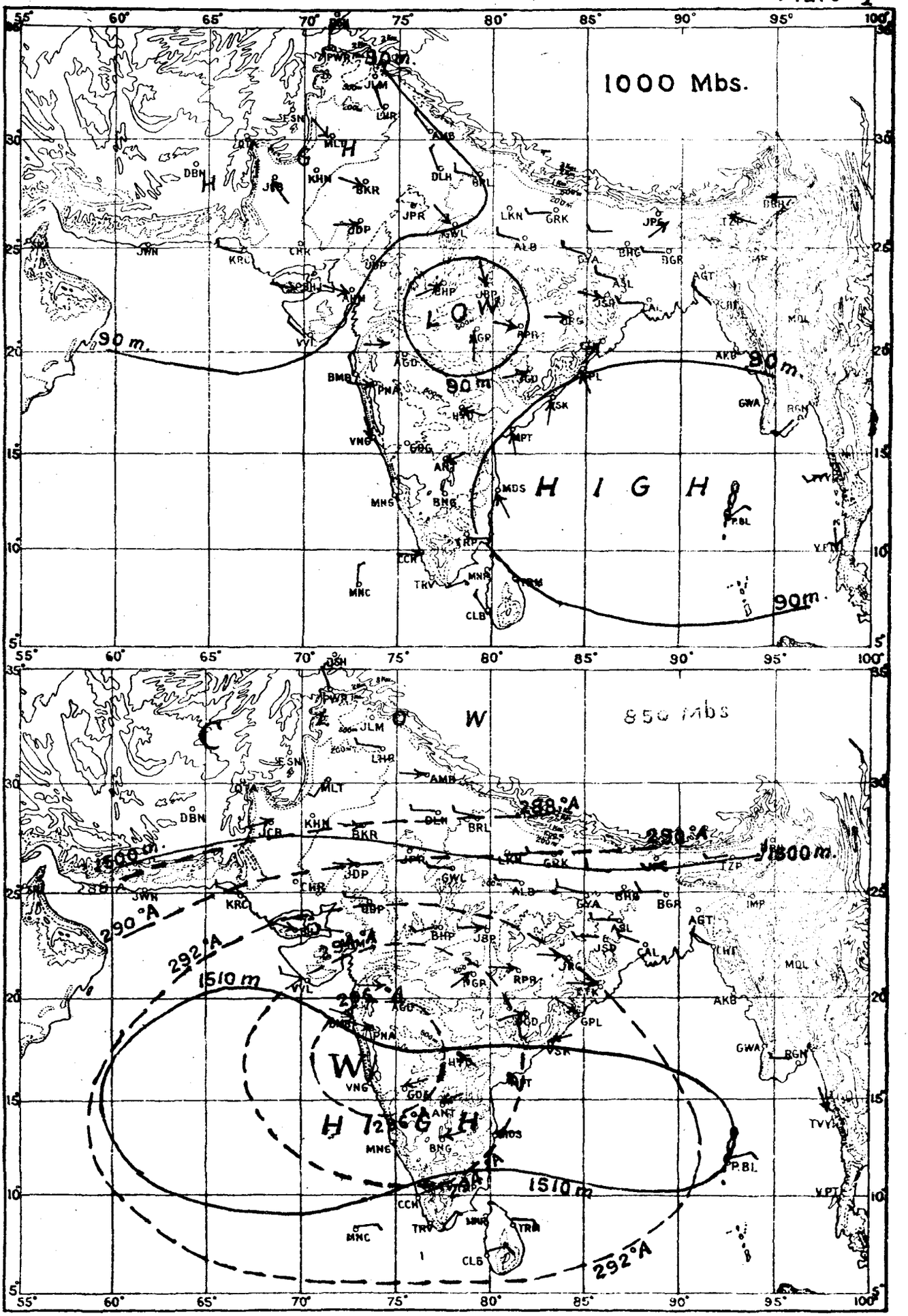
MARCH 1950

Height in Km.	n	V	v	D
		PORT BLAIR *(Contd.)*		
14	15	15·3	13·7	237
15	12	15·5	13·3	224
16	9	10·1	6·4	206
17	7	8·9	6·1	169
18	6	9·7	5·8	116
19	4	4·5	3·7	140
20	4	8·9	7·3	89
21	2	6·5	4·1	70
22	1	13·0	13·0	55
23	1	8·5	8·5	240
		RAIPUR		
10	6	27·1	24·9	286
11	2	17·0	16·2	306
12	1	16·5	16·5	281
13	1	26·5	26·5	300
14	1	30·5	30·5	290
15	1	37·5	37·5	285
16	1	34·5	34·5	281
17	1	40·0	40·0	280
18	1	34·0	34·0	285
19	1	32·5	32·5	295
		TEZPUR		
10	5	33·7	32·4	287
11	4	32·7	31·4	278
12	1	37·0	37·0	270
		TIRUCHIRAPALLI		
10	13	15·5	11·9	246
11	6	17·9	16·3	249
12	6	19·1	17·4	248
13	4	18·3	17·8	257
14	4	14·4	14·0	248
15	2	19·5	15·6	247
16	1	3·0	3·0	335
17	1	7·0	7·0	95
		TRIVANDRUM		
10	5	13·3	9·3	290
11	3	9·0	7·1	282
12	3	9·7	9·6	270
13	2	12·0	11·7	242
14	1	9·0	9·0	265
15	1	8·5	8·5	305
16	1	10·0	10·0	280
17	1	4·5	4·5	284
		UDAIPUR		
10	2	37·2	35·5	302
		VENGURLA		
10	10	20·3	17·1	301
11	5	24·0	21·9	322
12	3	14·8	12·4	308
13	1	20·0	20·0	290
14	1	21·0	21·0	285
		VERAVAL		
10	5	24·8	22·4	292
11	3	23·8	18·9	285
		VISAKHAPATNAM		
10	5	19·4	18·6	296
11	2	22·8	21·6	290

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

MARCH 1950.

Plate I



RESULTANT WIND —\= 5 Knots; —\= 10 Knots; —\= 50 Knots.

---- Isotherms in degrees absolute. —— Contours in geopotential metres.

I.P.Z. P. POONA, 53.

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

MARCH 1950

Plate II

RESULTANT WIND ——= 5 Knots; ——= 10 Knots, ——= 50 Knots.

- - - - - - Isotherms in degrees absolute. ———— Contours in geopotential metres.

G.P.Z. P. POONA, 53.

Registered No. B-30

INDIA WEATHER REVIEW, 1950

MONTHLY WEATHER REPORT

APRIL

Published by authority of the Government of India

The chief features of the month were—(i) Thunderstorm activity feebler than usual; (ii) abnormally warm days in northeast India and Eastern Pakistan on most days.

Of the seven western disturbances which moved across the country during the month, only the second was active. The first disturbance which was over Sind on the 31st March, moved to Rajasthan and became unimportant there by the 2nd without causing any appreciable precipitation. The second disturbance moved from Baluchistan to the hills of the Punjab (I) between the 31st March and 3rd April and caused widespread showers over the North-West Frontier Province, the Punjab (P) and Kashmir and local thundershowers in and near the hills of the Punjab (I) and in west Uttar Pradesh. A cold wave affected Western Pakistan in the rear of the disturbance and day temperatures which were already below normal dropped further and were as much as 10°-20° F. below normal over most of Western Pakistan and the adjoining areas on the 2nd and 3rd. The remaining five disturbances were feeble and caused little or no rain. The details of the western disturbances are set out in the following table.

TABLE

S. No.	Period	Course	Region	Nature of Precipitation	Period	Remarks
1	31st March to 2nd April	Sind-Rajasthan (Unimportant)	—	—	—	Feeble disturbance
2	31st March to 3rd April	Baluchistan to Punjab (I) hills.	N. W. F. P.	Widespread showers	1st-3rd	A cold wave affected Western Pakistan in the wake of the disturbance
			Punjab (P)	,, ,,	2nd	
			Kashmir	,, ,,	2nd	
			In and near hills of Punjab (I)	Local thundershowers	2nd & 3rd	
			west Uttar Pradesh.	,, ,,	3rd	
3	10th-12th	Sind-Rajasthan.	In and near North Rajasthan	Scattered duststorms	12th	
4	13th-17th	Baluchistan - the hills of west Uttar Pradesh.	N.W.F.P.	Scattered thundershowers	13th	
			Kashmir, the Punjab (P).	,, ,,	14th & 15th	
			the Punjab (I) and west Uttar Pradesh.	,, ,,	15th & 16th	
5	15th-18th	Baluchistan-Punjab (P) (unimportant)	—	—	—	Feeble disturbance
6	18th-20th	North Baluchistan-hills of the Punjab (I)	Kashmir	Isolated showers	20th & 21st	Feeble disturbance
7	25th-29th	Baluchistan-hills of the Punjab(I) and of west Uttar Pradesh.	—	—	—	Feeble disturbance

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The thunderstorm activity was feebler than usual over most of the country during the first half of the month. Weather became disturbed in the southwest Bay of Bengal on the 5th and a depression formed by the 8th morning centred within half a degree of Lat. 6° N., Long. 83½° E. The depression moved northnortheastwards and was centred near Lat. 8½° N., Long. 84° E. on the 9th morning. Thereafter, moving northeastwards and intensifying at the same time, it lay as a deep depression with its centre within a degree of Lat. 14° N., Long. 91° E. on the morning of the 12th. It crossed the Arakan coast near Diamond Island on the 13th morning and filled up rapidly over Lower Burma. According to newspaper reports, the depression was responsible for some damage to property and loss of a few lives in Rangoon.

In association with a surge of moist air, widespread thunder-rain occurred in Travancore-Cochin between the 5th and 10th, and in Malabar and south Kanara on the 9th, 10th and 12th. The falls were locally very heavy in Travancore-Cochin on the 10th, Alleppey recording 10·8″ of rain, during the 24 hours ending at 0830 hrs. I.S.T. on the 10th.

In the second fortnight, thunderstorm activity was mostly confined to Assam and Eastern Pakistan. Widespread or local thunderstorms occurred in Assam on most of the days between the 14th and 23rd and on the 29th and 30th, and in Eastern Pakistan on the 14th, 16th and 17th. Deccan (Desh) had scattered thunderstorms in the last week. Dry weather prevailed elsewhere in the Peninsula, in the central parts of the country and in northwest India throughout the second half of the month.

Days were hotter than usual in northeast India and Eastern Pakistan on most of the days. In particular, day temperatures were as much as 8° to 14° F. above normal over the most of Assam, West Bengal and Eastern Pakistan between the 20th and 28th. On the other hand northwest India and Western Pakistan had unusually cool weather during the month. Day temperatures were very much below normal over these two divisions in the first and the third weeks of the month.

The total rainfall of April was in large excess in the Bay Islands, normal in Travancore-Cochin and in moderate defect in Deccan (Desh). Elsewhere over India it was in large defect except in Rajasthan, Gujarat, Saurashtra and Kutch and south Hyderabad where no rain fell. Averaged over the plains of India, the month's rainfall was 68% in defect.

The mean maximum temperature was above normal in Assam and west Bengal and normal elsewhere. The mean minimum temperature was below normal in Punjab (I) and Vindhya Pradesh and normal elsewhere.

The mean relative humidity was in defect in Assam, West Bengal, Chota Nagpur, Bihar, Rajasthan, Saurashtra and Kutch, Hyderabad and Rayalaseema and normal elsewhere.

Cloud amount was in excess in the Bay Islands, normal in West Uttar Pradesh, the Punjab (I), east Rajasthan, Madhya Bharat, west Madhya Pradesh, the Madras State outside coastal Andhradesa and in Travancore-Cochin and in defect elsewhere.

Data from Jammu and Kashmir are incomplete.

Table I contains the divisional and sub-divisional means of rainfall, temperature and humidity and cloud amounts for the 13 chief political divisions and the 28 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 8·30 hours I.S.T. of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 8·30 hours I. S. T. of the date given in the succeeding column.

POONA 5,
dated the 6th October, 1950

C. RAMASWAMY,
for Director General of Observatories

	Rainfall				Departure from normal of				
							0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"	"	"		°	°	mb.	%	
1 Assam (including Manipur and Tripura)	3·30	6·73	-3·43	- 51	+3·1	-0·7	-1·3	-6	-1·2
2 West Bengal ...	0·79	2·08	-1·29	- 62	+2·1	-0·5	-3·1	-9	-1·4
3 Orissa ...	0·05	0·95	-0·90	- 95	+0·8	-0·1	-0·1	-1	-0·9
4 Bihar ...	0·08	0·61	-0·53	- 87	+1·2	-1·4	-3·7	-8	-0·6
5 Uttar Pradesh...	0·04	0·31	-0·27	- 87	-1·2	-1·3	-1·8	-2	-0·1
6 Punjab(I)(including PEPSU and Delhi) ...	0·02	0·47	-0·45	- 96	-0·7	-3·2	-2·6	-5	-0·1
7 Rajasthan ...	0	0·18	-0·18	-100	-1·5	-1·3	-3·0	-9	-0·4
8 Madhya Bharat and Vindhya Pradesh	0·01	0·24	-0·23	- 96	-0·2	-2·1	-0·6	0	-0·1
9 Madhya Pradesh	0·11	0·60	-0·49	- 82	+0·6	+0·2	-1·6	-3	-0·2
10 Bombay (including Saurashtra & Kutch)	0·16	0·39	-0·23	- 59	+0·6	+0·1	-1·4	-3	-0·7
11 Hyderabad ...	0·11	0·77	-0·66	- 86	+1·1	+1·1	-1·5	-7	-0·9
12 Madras (including Travancore-Cochin	0·68	1·55	-0·87	- 56	-0·1	-0·2	-1 7	-3	-0·2
13 Mysore ...	0·23	2·13	-1·90	- 89	+1·1	-0·1	-1·0	0	-0·7
Mean of India ...	0·31	0·96	-0·65	- 68	+0·2	-0·6	-1·8	-4	-0·5
Sub-Division									
1 Bay Islands ...	3·76	2·36	+1·40	+ 59	+0·4	+0·6	-0·4	-4	+1·9
2 Assam (including Manipur and Tripura)	3·30	6·73	-3·43	- 51	+3·1	-0·7	-1·3	-6	-1·2
3 West Bengal ...	0·79	2·08	-1·29	- 62	+2·1	-0·5	-3·1	-9	-1·4
4 Orissa ...	0·05	0·95	-0·90	- 95	+0·8	-0·1	-0·1	-1	-0·9
5 Chota Nagpur ...	0·15	0·76	-0·61	- 80	+1·0	-1·2	-3·1	-8	-0·5
6 Bihar ...	0·05	0·53	-0·48	- 91	+1·3	-1·5	-4·2	-9	-0·7
7 Uttar Pradesh, East ...	0·02	0·28	-0·26	- 93	-1·3	-1·3	-1·6	-2	-0·3
8 Uttar Pradesh, West ...	0·07	0·35	-0·28	- 80	-1·1	-1·3	-2·0	-3	+0·2
9 Punjab (Including PEPSU and Delhi)	0·02	0·47	-0·45	- 96	-0·7	-3·2	-2·6	-5	-0·1
10 Jammu and Kashmir	...	...	Data	incom	plete	...	...	...	...
11 Rajasthan, West	0	0·19	-0·19	-100	-1·6	-1·5	-1·5	-7	-0·5
12 Rajasthan, East, (including Ajmer)	0	0·18	-0·18	-100	-1·5	-1·1	-4·5	-9	-0·2
13 Madhya Bharat	0·01	0·19	-0·18	- 95	-0·3	-0·9	-1·1	0	+0·2
14 Vindhya Pradesh	0·01	0·30	-0·29	- 97	-0·2	-3·8	+0·1	+1	-0·5
15 Madhya Pradesh, East	0·21	1·07	-0·86	- 80	+1·1	+0·3	-2·4	-5	-0·7
16 Madhya Pradesh, West	0·04	0·31	-0·27	- 87	+0·3	+0·1	-1·1	-1	+0·1
17 Gujarat ...	0	0·03	-0·03	-100	+0·5	+0·4	-1·9	-2	-0·4
18 Saurashtra and Kutch ...	0	0·05	-0·05	-100	+0·3	-0·5	-3·2	-6	-0·8
19 Konkan ...	0·01	0·53	-0·52	- 98	-0·3	-0·3	+1·1	+3	-0·9
20 Deccan (Desh)	0·39	0·68	-0·29	- 43	+1·2	+0·3	-1·0	-4	-0·6
21 Hyderabad, North ...	0·23	0·65	-0·42	- 65	+0·7	+1·9	-0·3	-7	-0·9
22 Hyderabad, South ...	0	0·89	-0·89	-100	+1·5	+0·5	-2·4	-6	-0·9
23 Coastal Andhradesa	0·09	0·75	-0·66	- 88	+0·3	-0·6	-1·1	+1	-1·3
24 Rayalaseema	0·01	0·68	-0·67	- 99	+0·1	-0·7	-3·0	-8	-0·1
25 Tamilnad	0·49	1·55	-1·06	- 68	-0·3	-0·1	-2·3	-4	+0·1
26 Malabar and South Kanara	0·56	2·55	-1·99	- 78	-0·3	+0·5	-0·1	-1	+0·5
27 Mysore ...	0·23	2·13	-1·90	- 89	+1·1	-0·1	-1·0	0	-0·7
28 Travancore-Cochin	4·89	4·75	+0·14	+ 3	-0·9	+1·0	-0·3	+1	+0·7

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Rel hum
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Bay Islands																				
Port Blair ...	259	1001·2	-0·8	998·3	89·5	+0·4	93	3,4	75·3	+0·6	73	19,25	85·2	82·5	77·7	76·3	29·0	-0·4	28·4	69
Assam																				
Dibrugarh ...	348	996·7	-2·3	992·6	82·8	+1·8	90	11	65·3	-0·5	57	1	73·3	75·0	67·4	69·2	20·1	-1·6	21·5	74
Sibsagar ...	317	997·8	-1·9	993·5	83·4	+1·8	90	7,11	65·4	-0·6	56	1	74·3	76·7	69·6	72·0	22·9	+0·4	24·9	78
Tezpur ...	258	999·6	-2·2	994·8	89·2	+4·1	96	9	67·8	-0·1	59	1	76·8	82·3	68·7	71·7	20·4	-1·4	21·9	67
Gauhati ...	182	1001·6	-2·0	996·5	91·4	+3·8	93	11,26	67·2	-0·7	58	1	76·7	85·7	68·9	70·9	20·4	-2·0	18·9	67
Dhubri ...	115	1003·9	-1·6	998·7	92·4	+4·2	101	11,23	68·5	-1·6			78·6	86·8	69·6	71·2	20·6	-2·1	19·1	63
Silchar (R) ...	96																			
Tura ...	1215				91·0	...	99	23	72·4	...	62	14,16	80·3	85·5	68·7	70·3	18·7	...	18·4	55
West Bengal																				
Dum Dum ...	33	1006·1	...	1001·6	99·8	...	108	23	76·1	...	65	1,2	86·4	93·1	75·9	75·0	25·8	...	21·6	61
Calcutta ...	21	1006·5	-1·3	1002·1	99·8	+3·0	105	4 days	76·9	+1·4	67	1	86·8	92·2	76·6	76·8	26·9	-1·9	24·3	62
Saugor Island ...	10	1007·1	-1·3	1003·4	89·6	-0·1	100	8	79·5	+0·1	70	15	85·0	83·8	78·4	79·0	31·5	+0·7	31·4	73
Sandheads ...	32	1006·5	-2·0	1003·0	...	...	...	...	...	...	...	...	83·3	83·6	79·2	79·7	32·4	+0·5	32·7	82
Midnapore ...	149	1002·0	-1·2	997·1	104·0	+3·1	111	23	74·4	-1·8	64	1	87·5	98·2	73·1	74·0	21·2	-4·7	18·0	50
Contai ...	36	1005·7	...	1002·1	94·6	...	103	9,24	78·0	...	68	13	85·4	86·1	78·3	79·6	30·0	...	31·6	71
Burdwan ...	106	1003·2	-1·3	998·2	102·5	+2·8	109	23	75·1	+0·1	64	1	84·7	98·8	72·9	71·2	22·0	-4·2	13·7	55
Krishnagar ...	48	1005·6	-1·0	1000·6	103·8	+4·9	111	23	73·3	-0·9	62	1	84·3	97·8	74·2	75·5	24·4	-2·4	19·7	61
Asansol ...	414	992·7	-1·0	987·9	103·3	+1·5	111	30	74·5	+0·3	61	1	88·7	98·9	71·3	70·9	18·2	-2·5	13·1	38
Berhampore ...	62	1004·8	-1·4	999·8	102·3	+3·3	109	22,23,30	72·5	-1·5	64	1	85·4	97·5	71·6	69·3	20·0	-5·0	12·0	50
Malda ...	103	1003·1	-1·4	998·3	99·1	+1·6	107	22	70·1	-1·2	60	1	85·3	95·0	70·4	71·7	18·5	-4·1	75·7	47
Cooch Behar ...	145	1002·8	...	997·4	91·2	...	98	23	67·5	...	60	2	78·8	86·0	68·9	72·3	19·5	...	21·1	59
Jalpaiguri ...	271	993·0	-1·8	993·0	87·9	-1·6	94	12	67·1	-1·0	61	11	75·4	86·9	67·5	71·3	18·7	-3·4	19·2	65
Orissa																				
Balasore ...	65	1005·0	-1·2	1001·4	98·3	+1·3	104	24,25	76·1	+0·1	65	1	86·8	87·1	75·9	77·8	26·5	-1·3	28·0	59
Chandbali ...	20	1006·5	-1·9	1003·1	99·7	+1·1	106	23,25	76·8	+0·1	66	1	85·0	88·5	77·9	79·3	29·6	+0·2	30·3	72
Puri ...	20	1007·3	-1·1	1003·6	88·2	+0·5	90	2,27	80·4	+1·3	72	13	84·7	84·2	79·8	80·3	32·4	+0·9	33·4	80
Cuttack ...	87	1004·5	-1·6	1000·0	101·2	0	107	4 days	78·1	+0·6	69	1,3	83·5	92·8	76·5	77·1	28·0	-0·7	25·0	70
Gopalpur ...	56	1005·9	-1·1	1002·2	89·5	+1·3	93	1,2	77·5	+0·4	70	1,2	83·6	83·9	78·6	81·1	31·2	+1·1	34·7	80
Angul ...	455	992·1	-1·0	986·9	102·4	+0·4	107	19,24,25	75·3	0	66	1	82·3	100·6	74·1	72·1	25·4	+1·3	13·9	67
Sambalpur ...	486	990·8	-1·1	985·8	104·1	+1·1	110	30	72·2	-2·7	64	1	86·6	101·2	70·0	69·9	17·7	-2·1	10·6	41
Jharsuguda ...	726	982·5	...	977·7	...	...	...	...	...	...	...	...	86·7	97·7	68·2	67·2	15·2	...	9·0	36
Titilagarh ...	691	984·0	...	979·3	104·3	...	110	30	76·7	...	66	1	86·0	100·7	69·7	71·0	17·2	...	12·7	41
Chota Nagpur																				
Purulia ...	835	978·8	...	974·1	102·8	...	110	30	76·0	...	67	12	87·4	98·0	70·2	75·9	17·7	...	20·7	41
Jamshedpur ...	423	992·7	-1·2	987·5	103·5	+1·5	109	4 days	73·2	-0·6	64	1	86·4	100·0	69·5	69·3	16·8	-2·1	10·8	40
Chaibasa ...	742	982·0	-0·8	976·8	104·3	+2·2	110	4 days	75·1	+0·4	65	1	85·4	101·0	68·6	68·4	16·0	-5·1	9·1	40
Ranchi ...	2,150	936·1	0	932·0	98·6	+2·9	105	26,27,30	...	...	...	...	84·9	92·1	63·2	63·5	11·2	-2·5	8·6	29
Hazaribagh ...	2,006	940·1	-1·0	936·3	96·8	-0·4	104	30	69·9	-1·9	59	1	84·8	92·2	61·4	62·9	9·0	-3·8	7·5	2·
Daltonganj ...	725	982·6	-0·7	977·8	100·4	-1·0	109	30	67·2	-2·8	60	1	85·1	96·9	65·4	66·7	12·8	-1·9	9·0	3
Dhanbad ...	839	978·7	...	...	101·8	...	109	30	73·9	...	66	14	87·7	...	64·4	...	9·9	...	...	2
Bihar																				
Purnea ...	124	1002·6	-1·3	997·3	97·6	+1·3	105	23	65·8	-3·4	58	1,11,26	80·6	92·7	66·3	69·7	15·4	-5·4	14·4	4
Saharsa ...	156	1000·9	...	996·1	97·9	...	107	23	66·6	...	58	1	80·5	94·1	65·3	67·9	14·7	...	11·8	4

(R) Register not received.

Cloud amount (Oktas)			Rainfall. inches				No of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from:—																	STATION
											0830 hrs. I. S. T.										1730 hrs. I. S. T.								
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bay Islands
6·6	+1·9	5·2	3·76	+1·40	2·35	12	5	−0·1	6·2	+0·3	2	5	4	2	1	2	7	5	2	0	3	5	4	2	2	4	3	7	Port Blair
																													Assam
6·3	+0·2	5·9	6·25	−3·24	1·90	19	9	−4·6	1·8	+0·2	6	14	9	0	0	0	0	0	1	1	9	7	0	2	0	0	0	11	Dibrugarh
6·6	−1·4	5·4	7·05	−3·07	1·80	17	10	−4·1	3·8	+1·1	4	19	2	1	0	1	0	0	3	5	18	0	0	0	1	0	0	6	Sibsagar
6·7	−1·4	2·5	2·54	−3·47	0·65	17,30	6	−4·7	3·5	−0·7	2	9	15	2	0	0	1	0	1	0	13	10	0	0	1	3	0	3	Tezpur
6·9	−1·9	2·3	0·86	−4·85	0·48	17	3	−7·0	3·1	+1·1	11	9	4	1	0	0	3	2	0	2	7	6	1	0	1	1	1	11	Gauhati
6·3	−1·5	0·5	2·80	−2·62	1·25	15	4	−4·1	4·9	−1·4	1	9	11	2	3	3	0	0	1	4	3	2	1	2	6	5	4	3	Dhubri
																													Silchar (R)
6·6	...	1·4	1·08	...	0·74	30	2	...	6·4	...	0	0	4	8	4	12	0	0	2	0	1	2	9	6	6	0	0	6	Tura
																													West Bengal
6·5	...	1·6	1·42	...	0·85	15	2	...	8·3	...	4	0	1	0	10	9	3	3	0	2	0	0	1	16	8	1	2	0	Dum Dum
6·6	−1·4	1·7	2·15	+0·40	2·15	14	1	−2·0	4·5	−0·4	2	1	0	1	8	13	2	2	1	0	0	0	1	13	8	1	0	7	Calcutta
2·6	−1·8	2·2	1·05	−0·12	0·90	15	2	−0·1	16·8	+3·1	1	0	0	1	10	15	2	1	0	0	0	0	5	17	8	0	0	0	Saugor Island
2·6	−0·3	1·9	0·39	−0·19	0·39	14	1	−0·1	...	...	0	0	1	1	2	22	1	1	2	0	0	0	1	13	14	1	1	0	Sandheads
0·4	−1·7	1·6	0·80	−0·90	0·45	13	2	−1·1	4·6	+0·9	6	4	0	0	5	12	0	0	3	4	1	1	1	11	2	0	0	10	Midnapore
2·3	...	1·3	0·10	...	0·10	15	1	...	10·6	...	1	0	0	2	8	15	1	2	1	0	0	0	2	23	4	0	0	0	Contai
0·7	−2·2	0·9	0·35	−1·59	0·35	12	1	−2·2	5·1	+2·1	1	1	1	0	3	15	2	2	5	0	0	0	0	3	2	3	6	16	Burdwan
1·9	−0·9	1·2	0·05	−2·23	0·05	12	0	−3·7	5·5	+0·4	2	0	2	0	21	2	3	0	0	1	0	0	1	6	4	9	1	8	Krishnagar
0·5	−1·7	1·2	0	−0·83	0	...	0	−1·8	4·8	−0·1	0	0	2	4	3	0	8	8	5	0	0	1	2	0	0	14	9	4	Asansol
1·3	−1·9	1·5	0·84	−0·64	0·79	12	1	−1·7	2·7	−0·8	0	0	2	3	15	1	4	1	4	1	2	2	0	5	0	7	5	8	Berhampore
1·7	−0·2	0·9	0	−1·18	0	...	0	−2·0	5·7	+0·7	1	1	3	2	4	10	6	1	2	2	4	1	0	1	1	11	9	1	Malda
3·6	...	1·0	0·76	−4·89	0·18	29	5	−2·3	3·6	...	1	3	19	3	3	1	0	0	0	5	5	4	2	0	1	0	1	12	Cooch Behar
2·0	−0·6	0·9	2·45	−1·24	0·95	13	4	−1·5	3·7	+1·3	2	7	15	0	0	0	1	0	5	1	11	5	0	1	0	1	0	11	Jalpaiguri
																													Orissa
0·7	−1·9	2·1	0·21	−1·54	0·18	12	1	−2·5	6·3	+0·9	4	3	0	0	7	9	3	3	1	0	0	0	11	16	3	0	0	0	Balasore
1·2	−2·0	1·8	0·34	−1·10	0·14	15	3	+0·1	8·2	−0·5	0	0	0	1	10	12	2	5	0	0	0	2	21	5	1	0	1	0	Chandbali
3·9	+0·7	4·2	0	−0·58	0	...	0	−1·0	15·0	+2·5	1	0	0	0	4	22	3	0	0	0	0	0	1	12	16	1	0	0	Puri
2·4	−0·7	2·3	0·05	−1·02	0·05	13	0	−1·7	4·2	+0·6	0	0	0	0	4	5	0	0	21	0	1	0	1	12	11	0	0	5	Cuttack
1·0	−0·6	2·8	0·06	−0·64	0·04	14	0	−1·4	13·8	+1·4	1	2	0	1	4	15	1	0	6	1	0	0	2	6	20	1	0	0	Gopalpur
0·9	−1·9	1·9	0	−1·03	0	...	0	−2·2	4·5	−0·2	3	3	4	3	3	1	6	4	3	7	2	1	9	3	1	2	3	2	Angul
1·0	−0·9	1·5	0	−0·59	0	...	0	−1·6	2·5	−0·4	1	5	2	1	7	4	3	0	7	7	1	2	0	1	3	4	6	6	Sambalpur
0·9	...	1·2	0	...	0	...	0	...	...	...	8	1	0	0	1	0	0	0	20	0	0	1	0	0	0	6	4	19	Jharsuguda
1·4	...	1·8	0·13	...	0·13	11	1	...	2·0	...	0	0	0	6	9	4	3	0	8	4	4	0	0	2	1	3	5	11	Titilagarh
																													Chota Nagpur
0·7	...	1·5	0·17	...	0·17	12	1	...	2·9	...	6	3	1	1	2	2	3	11	1	8	2	0	2	0	0	3	14	1	Purulia
0·7	−1·1	2·0	0·21	−0·69	0·12	13	1	−1·1	3·6	+0·3	0	1	3	0	6	2	7	11	6	2	3	1	2	1	1	6	9	5	Jamshedpur
3·4	+1·6	4·2	0·04	−1·02	0·03	12	0	−2·2	2·2	−0·3	0	1	0	0	1	5	1	0	22	3	3	0	0	0	4	3	3	14	Chaibasa
0·1	−1·7	0·8	0·45	−0·44	0·45	12	1	−1·4	4·1	−0·8	1	0	1	0	1	2	0	5	20	7	0	0	0	0	0	3	12	8	Ranchi
1·3	−0·5	1·6	0·05	−0·50	0·05	12	0	−1·5	7·0	+0·5	1	1	0	1	3	3	1	15	5	4	2	0	1	1	0	0	22	0	Hazaribagh
0·7	−0·6	1·0	0	−0·41	0	...	0	−0·8	2·9	−0·6	1	2	2	2	0	1	6	1	15	2	1	0	0	0	1	4	21	1	Daltonganj
...	...	...	0	...	0	...	0	...	5·4	...	4	1	0	0	2	12	4	3	4	...	...	...	...	...	...	...	...	...	Dhanbad
																													Bihar
1·3	−0·9	1·1	0	−1·28	0	...	0	−1·8	4·8	+1·4	2	0	12	1	0	2	9	1	3	0	0	2	0	1	1	9	0	17	Purnea
1·4	...	1·0	0·32	...	0·32	13	1	...	4·8	...	2	4	7	0	0	6	8	0	3	0	0	3	0	0	0	16	2	9	Saharsa

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M.

STATION	Height of bar, cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Re hu
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Bihar *(Contd)*																				
Darbhanga ...	161	1001·1	−1·2	996·3	97·9	+0·9	106	22	68·8	−1·0	61	1	80·4	94·8	66·7	71·0	16·4	−4·5	14·8	47
Motihari ...	218	998·7	−1·2	994·1	96·8	−0·2	104	22	62·6	−5·1	55	8	80·6	88·1	67·4	70·3	17·2	−2·6	17·8	48
Patna ...	173	1000·6	−1·0	996·2	99·6	+0·7	106	22,30	72·9	−0·6	63	1	84·1	96·1	64·3	66·8	11·5	−6·0	8·4	31
Dehri ...	352	994·4	...	990·3	102·4	...	111	30	75·2	...	65	1	85·5	98·3	63·3	67·1	10·1	...	8·8	25
Gaya ...	365	994·1	−0·9	989·8	103·2	+1·3	112	30	72·1	−0·6	62	1	88·3	99·3	65·9	63·6	11·5	+0·4	4·2	30
Dumka ...	489	989·8	−1·4	985·2	102·4	+2·5	110	30	72·3	−1·5	65	1	85·9	97·4	65·9	67·3	12·7	−6·9	9·4	30
Sabour ...	122	1002·3	−1·3	997·3	100·2	+1·0	107	22,23	67·8	−1·8	57	1	85·6	95·8	67·0	68·9	14·3	−3·7	11·8	37
U. P., East																				
Gonda ...	360	994·2	...	990·5	99·0	−0·8	108	30	68·1	−0·4	58	1	81·6	94·9	63·8	66·0	12·2	−0·1	8·7	31
Gorakhpur ...	254	997·4	−1·4	993·6	99·1	−0·2	106	30	71·2	−0·3	63	1	82·8	96·3	64·4	67·1	12·4	−4·9	9·7	33
Azamgarh ...	255	997·1	...	993·6	101·6	...	110	30	68·5	...	62	1,2	79·6	97·4	68·1	76·7	18·3	...	21·8	53
Banaras ...	250	998·2	−0·7	993·9	100·9	−0·9	109	30	69·9	−1·7	62	1	83·7	99·0	65·2	68·6	12·9	−2·8	10·0	34
Allahabad ...	322	996·3	−0·3	992·0	100·4	−2·2	110	30	70·3	−1·1	64	5	84·1	98·3	63·3	66·3	10·6	−2·6	7·6	27
(Bamrauli) Fatehpur ...	375	994·4	...	990·4	99·8	−1·2	110	30	69·0	−0·9	62	5	82·5	98·6	65·2	73·1	13·1	−2·4	15·1	36
Banda ..	398	993·8	...	989·5	101·5	...	110	30	69·4	...	63	4,5	85·4	100·0	65·1	71·7	12·1	...	13·7	29
Kanpur ...	414	992·8	−0·4	989·8	99·3	−0·1	109	30	70·2	−0·4	61	9	81·3	97·2	65·6	71·3	14·5	+2·2	14·3	42
Lucknow ...	371	994·4	−0·2	990·8	99·4	−2·0	109	30	63·3	−2·5	60	4	80·7	94·9	63·9	68·7	12·8	−1·5	12·2	37
Bahraich ...	407	992·8	−0·4	989·4	96·1	−2·8	108	28,29,30	66·5	−2·8	58	1	81·5	94·0	68·3	72·5	17·9	+1·6	17·5	47
U. P., West																				
Jhansi ...	823	980·1	−0·2	975·9	101·3	−1·3	110	30	72·9	+0·7	60	1	83·9	98·2	63·2	69·0	10·6	−1·7	11·1	28
Agra ...	553	988·5	−0·3	985·0	97·9	−2·1	107	30	68·9	−0·7	61	6,8	78·2	96·1	59·3	64·4	8·6	−1·1	7·6	27
Mainpuri ...	516	989·7	−0·1	985·3	99·6	−1·6	110	30	66·7	−2·5	57	4	82·2	96·3	65·9	73·4	14·3	+1·1	16·9	40
Aligarh ...	615	985·9	..	982·9 (b)	97·0	+0·4	108	30	66·7	−1·4	57	4	78·2	95·2 (b)	60·8	66·4 (b)	10·1	−0·8	9·8 (b)	32
Bareilly ...	568	986·8	−0·9	983·6	97·5	−0·3	107	30	67·6	−1·2	60	4	80·0	94·2	61·3	64·2	10·1	−5·3	7·1	29
Meerut ...	728	981·7	...	...	95·2	...	106	30	66·5	...	59	1	75·3	...	60·8	...	11·7	...	...	40
Roorkee ...	899	975·8	−0·9	972·8	94·2	−1·5	104	29,30	62·3	−3·7	52	8	75·3	91·3	59·2	63·2	9·9	−2·8	7·1	34
Dehra Dun ...	2239	931·6	−0·6	929·2	88·7	−1·2	100	28	61·3	−1·2	55	4 days	73·2	86·1	58·9	61·3	9·3	−2·5	7·1	41
Punjab (I)																				
New Delhi ...	714	982·9	−0·3	979·5	95·5	−1·1	105	30	67·1	−0·6	58	4	78·5	93·9	59·3	62·4	9·5	−2·7	5·1	26
Hissar ...	725	982·8	−0·2	979·7	97·8	0	108	29	62·8	−3·9	54	4	74·0	95·4	60·3	68·4	11·7	−1·3	11·5	41
Karnal ...	818	978·7	...	976·1	93·8	...	104	29,30	64·5	...	56	4	75·3	91·5	59·1	61·9	10·0	...	5·7	33
Ambala ...	892	975·1	−1·6	973·4	95·7	−0·3	106	29,30	64·3	−2·1	56	11	74·2	93·0	57·3	63·8	8·3	−4·3	7·3	29
Patiala ...	822	976·6	...	975·7	93·3	...	104	29	64·3	...	57	6	76·0	90·4	61·3	64·6	11·9	...	9·2	40
Ludhiana ...	812	979·2	−0·4	976·8	94·7	−1·0	106	29	62·1	−4·4	54	6	71·9	92·1	58·9	65·6	11·2	−2·0	9·5	44
Ferozepore ...	657	984·9	...	982·5	92·5	...	103	29	60·2	...	52	6	74·8	88·9	59·9	66·5	10·8	...	12·1	41
Amritsar ...	756	981·4	...	978·9	90·3	...	103	29	58·1	...	51	6	71·2	87·3	61·1	65·8	13·8	...	12·0	55
Jammu & Kashmir																				
Srinagar ...	5,205	841·9	−0·5	839·4	60·9	−5·9	75	28	42·6	−2·0	38	9	49·1	59·0	45·5	49·7	9·1	−1·6	9·8	78
Gulmarg ...	8,709	...	...	...	...	...	...	closed during winter months ...					...	...	...	...	...	...	...	...
Dras (R) ...	10,059																			
Leh ...	11,529	665·5	−1·3	663·7	48·3	−7·1	59	30	27·4	−2·9	23	7,12,18	34·3	44·8	28·3	34·7	3·4	−0·9	3·6	51
Skardu (R) ...	7,505																			
Gilgit (R) ...	4,890																			
Misgar (R) ...	10,190																			

(R) Register not received.

(b) Mean of 29 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from ;—																			STATION
											0830 hrs. I. S. T.										1730 hrs. I. S. T.									
Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 h.s. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bihar *(Contd)*
1·0	-0·4	0·2	0·07	-0·61	0·07	13	0	-1·3	3·3	-0·5	1	7	6	0	0	0	11	0	5	0	0	2	0	0	2	12	4	10	Darbhanga
0·4	-0·7	0·5	0	-0·82	0	...	0	-1·4	4·5	+0·6	0	0	16	1	0	0	9	0	4	0	0	1	0	0	0	8	0	21	Motihari
1·2	-0·1	1·1	0·05	-0·22	0·05	13	0	-0·6	6·0	+1·7	1	6	2	0	1	5	7	7	1	6	1	1	0	0	0	9	13	0	Patna
1·0	...	1·4	0	-0·23	0	...	0	-0·6	5·1	...	1	0	1	0	3	17	2	6	0	3	3	0	0	0	1	2	20	1	Dehri
0·6	-0·7	1·1	0·04	-0·20	0·04	13	0	-0·6	7·4	+1·6	0	1	3	2	7	9	7	1	0	3	1	0	0	0	0	14	11	1	Gaya
0·4	-1·2	0·7	0·32	-0·52	0·32	12	1	-0·9	4·5	+1·9	0	0	1	4	1	6	13	5	0	1	1	2	0	1	4	10	11	0	Dumka
1·3	-0·6	1·4	0	-0·72	0	...	0	-1·3	7·2	+1·2	0	4	6	0	1	5	12	1	1	2	3	0	0	1	0	13	10	1	Sabour
																													U. P., East
0·8	-0·6	1·4	0·10	-0·25	0·10	3	1	+0·9	5·4	-0·6	0	0	9	0	0	0	14	4	3	0	0	0	0	0	0	7	17	6	Gonda
0·7	-0·4	1·2	0	-0·37	0	...	0	-0·7	4·4 (m)	+1·6	0	2	6	1	0	1	15	1	4	1	0	1	0	0	1	21	3	0	Gorakhpur
0·9	...	1·3	0	...	0	...	0	...	3·5	...	1	0	3	0	1	4	13	3	5	0	1	0	0	0	4	16	6	3	Azamgarh
0·8	-0·5	1·2	0	-0·20	0	...	0	-0·4	3·3	0	0	0	1	2	1	12	8	0	6	1	0	0	0	0	0	18	9	2	Banaras
0·7	-0·7	1·4	0·02	-0·15	0·02	15	0	-0·4	3·5	-0·6	0	0	3	2	1	5	13	4	2	0	1	0	0	0	0	13	15	1	Allahabad
1·2	-0·1	1·5	0·02	-0·31	0·02	3	0	-0·6	4·5	+1·0	1	0	1	2	2	2	5	10	7	0	0	1	0	0	0	3	18	8	(Bamrauli) Fatehpur
0·5	...	0·8	0	...	0	...	0	...	3·1	...	1	0	0	0	0	1	26	1	1	2	0	0	0	1	0	25	2	0	Banda
1·1	+0·5	1·0	0	-0·22	0	...	0	-0·6	8·3	+1·0	2	1	1	1	0	6	9	2	8	2	1	3	1	0	4	11	7	1	Kanpur
1·0	-0·2	1·3	0	-0·25	0	...	0	-0·6	2·9	+0·5	1	0	2	2	3	1	14	5	2	0	1	2	0	0	4	13	10	0	Lucknow
0·6	-0·4	1·3	0	-0·32	0	...	0	-0·6	4·4	+1·0	0	0	4	4	0	2	10	7	3	0	0	0	0	0	5	11	5	9	Bahraich
																													U. P., West
1·3	-0·2	1·0	0·01	-0·13	0·01	13	0	-0·5	4·7	+1·1	4	2	1	0	0	3	7	3	10	2	2	0	0	0	2	9	7	8	Jhansi
1·2	-0·1	1·6	0	-0·21	0	...	0	-0·6	2·7	-1·2	1	0	0	0	0	1	0	0	28	2	0	0	0	1	5	5	5	13	Agra
2·4	+1·0	1·8	0·04	-0·19	0·01	3	0	-0·7	3·7	+1·4	0	0	1	1	1	5	10	7	5	0	0	0	0	0	2	15	8	5	Mainpuri
1·9	+0·9	1·8	0·18	-0·31	0·18	3	1	0	5·4	+0·4	1	0	1	0	1	0	0	6	21	0	0	0	0	0	4	6	16	4	Aligarh
1·4	-0·2	2·3 (b)	0	-0·27	0	...	0	-0·6	4·3	+1·7	1	0	1	1	1	1	9	9	7	1	0	2	0	0	1	19	3	3	Bareilly
1·2	...	...	0	-0·37	0	...	0	-0·8	5·8	...	1	0	1	1	0	0	3	14	10	...	...	...	...	...	...	...	...	...	Meerut
1·7	+0·2	2·4	0·11	-0·34	0·11	3	1	-0·1	3·4	+0·6	0	2	0	5	0	1	0	5	17	0	0	0	4	0	0	0	20	6	Roorkee
1·8	-0·5	2·4	0·19	-0·46	0·19	3	1	-0·7	2·7	+0·3	0	2	0	0	0	4	6	0	18	0	1	0	0	1	16	9	1	2	Dehra Dun
																													Punjab (I)
1·8	+0·3	2·0	0	-0·33	0	...	0	-0·9	9·0	...	2	1	3	2	0	3	11	8	0	1	1	1	2	0	2	3	18	2	New Delhi
0·9	-0·5	0·7	0	-0·26	0	...	0	-0·9	5·4	+1·1	2	2	0	4	4	6	3	7	2	4	0	0	0	3	7	6	9	1	Hissar
1·9	...	1·9	0·13	...	0·13	3	1	...	5·0	...	3	2	0	4	0	2	7	9	3	0	1	2	1	0	5	7	14	0	Karnal
1·5	-0·3	1·1	0·02	-0·62	0·02	2	0	-1·6	6·2	-2·6	3	0	2	0	0	1	2	2	20	0	0	1	0	0	1	1	11	16	Ambala
2·1	...	2·0	0·01	...	0·01	2	0	...	5·1	...	9	1	2	3	1	0	0	7	7	11	0	2	2	1	2	0	12	1	Patiala
1·7	-0·1	1·4	0·06	-0·59	0·06	3	0	-1·3	3·7	+1·7	1	6	3	1	1	2	3	11	2	2	0	0	0	0	1	2	16	9	Ludhiana
1·2	...	0·9	0·03	...	0·03	2	0	...	2·5	...	5	6	1	1	3	0	0	6	8	8	3	1	0	1	3	1	12	1	Ferozepore
1·9	...	2·5	0·30	...	0·13	16	1	...	4·6	...	8	5	5	0	0	0	2	7	3	9	2	2	0	0	1	3	13	0	Amritsar
																													Jammu & Kashmir
3·9	-0·2	5·4	4·31	+0·65	1·10	17	9	+1·9	3·4	+0·2	3	4	0	11	2	1	2	3	4	6	1	0	1	1	0	7	12	2	Srinagar
																													Gulmarg
																													Dras (R)
3·6	-0·6	5·6	0·58	+0·35	0·56	17	1	+0·2	4·3	+1·6	0	2	0	1	6	5	0	0	16	1	2	0	2	3	6	9	5	2	Leh
																													Skardu (R)
																													Gilgit (R)
																													Misgar (R)

(m) Mean of 18 days

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relat humic %	
		Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Rajasthan, West																					
Sri Ganganagar ...	580	(e) 987·0	...	(d) 983·4	92·6	−2·8	105	29	59·9	−2·1	50	24	75·0	89·9	62·7	67·9	14·0	+2·4	13·5	38	−4
Bikaner ...	734	982·4	0	979·1	96·8	−3·4	107	29	66·2	−4·2	54	4	77·0	95·3	57·1	64·7	7·0	−1·8	7·1	24	−4
Jaisalmer ...	793	980·5	...	977·1	97·9	...	105	28,29,30	68·6	...	57	3,4	77·9	96·7	66·9	78·6	17·6	...	25·0	54	..
Jodhpur ...	736	982·9	−0·9	979·5	98·4	−1·0	107	29	71·9	+1·1	60	4	79·0	97·9	59·4	65·7	8·6	−2·1	7·5	26	−6
Phalodi ...	783	981·4	...	978·5	97·5	...	107	29	68·6	...	57	3	76·5	96·5	59·3	67·6	9·9	...	9·7	33	..
Barmer ...	638	986·0	−0·5	983·1	101·2	+0·9	109	11,28,29	73·6	−0·7	64	5	76·3	98·6	63·8	71·4	14·4	−4·3	14·2	37	−16
Rajasthan, East																					
Sikar ...	1419	960·0	...	957·4	94·6	...	104	29	64·2	...	53	4	78·8	92·7	60·8	67·9	8·0	...	12·1	32	..
Jaipur ...	1431	959·6	−0·6	956·3	96·1	−2·1	105	29	(c) 68·9	+0·1	61	4,5	83·1	93·9	58·9	61·7	6·3	−4·1	4·6	17	−11
Ajmer ...	1593	954·6	−0·4	951·1	94·7	−2·6	103	28,29	70·8	−0·7	62	25	79·5	93·1	56·9	60·8	6·8	−5·8	5·1	20	−1
Kotah ...	843	979·7	0	975·2	100·1	−1·6	108	29,30	73·3	−2·5	65	4	83·5	98·8	60·3	64·7	7·5	−3·1	5·8	19	−(
Jhalawar ...	1053	971·7	−1·4	967·3	100·9	+0·4	109	30	69·0	−1·1	62	4	80·2	99·6	57·8	63·4	6·1	−5·0	7·3	18	−1
Udaipur ...	1910	944·3	...	940·9	96·4	...	103	28,29	67·2	...	60	3	80·9	94·1	59·0	63·9	8·3	...	5·7	23	..
Madhya Bharat																					
Gwalior ...	681	983·9	...	980·1	100·3	...	110	30	69·3	...	60	5	84·1	96·9	59·7	63·3	6·6	...	4·7	17	..
Guna ...	1571	954·7	−1·1	951·3	99·2	−0·4	107	30	65·0	−1·9	57	25	81·2	96·3	59·8	64·8	9·0	−0·9	8·1	25	−
Neemuch ...	1626	953·9	−0·3	950·1	98·7	−0·4	107	29	69·4	−1·5	60	5	81·1	96·7	63·0	69·5	12·3	−0·7	13·5	35	+
Ratlam ...	1596	954·8	...	951·0	99·6	...	107	28	71·4	...	61	18	76·5	97·6	60·7	70·7	11·7	...	14·7	39	.
Indore ...	1839	946·3	−1·1	942·6	99·9	−1·0	106	28,29,30	68·2	+0·2	62	4,5	81·6	97·5	63·6	68·9	12·8	−3·0	12·5	35	−
Bhopal ...	1643	952·6	−0·9	948·8	100·0	+0·8	106	29,30	71·0	−0·3	63	4	83·4	97·4	61·5	65·7	9·2	0	8·6	26	+
Bairagarh ...	1714	950·4	−0·7	946·5	100·4	+1·2	107	29,30	69·6	−1·3	62	13	82·8	97·3	60·6	65·2	9·0	−1·1	8·4	24	(
Madhosagar ...	757	981·9	...	977·8	99·4	...	108	30	71·3	...	63	9	83·3	96·8	61·3	65·8	8·6	...	7·7	23	.
Vindhya Pradesh																					
Nowgong ...	750	982·4	−0·1	978·1	99·8	−2·0	109	30	65·1	−5·0	59	4,5,13	84·1	98·2	63·2	68·5	10·4	−2·8	10 4	26	−
Sutna ...	1041	972·3	−0·1	968·6	100·5	0	109	30	67·5	−4·0	61	1,5,10	83·7	97·3	65·5	70·7	13·3	+1·4	13·6	32	−
Umaria ...	1506	957·2	...	953·4	100·4	+1·5	108	30	66·4	−2·3	58	1	83·4	97·0	64·5	68·2	13·0	+1·8	11·8	35	+
Madhya Pradesh East																					
Gondia ...	1026	972·9	...	968·2	102·9	...	109	30	73·7	...	67	1,12	86·2	100·7	67·6	72·2	14·6	...	14·0	34	.
Pendra ...	2040	939·2	-0·9	935·6	97·4	+2·0	105	30	72·4	+1·3	65	9	84·9	93·9	61·8	65·7	9·5	−2·8	10·2	24	-
Champa ...	805	980·0	...	975·4	103·5	...	110	30	74·7	...	67	1	83·9	101·4	66·8	71·7	14·7	...	13·1	38	
Raipur ...	979	974·3	−1·0	969·9	102·2	−0·6	109	30	77·2	+0·9	68	1	85·6	100·7	69·0	73·1	16·7	+1·9	15·3	40	
Kanker ...	1318	963·3	-1·0	959·0	101·1	+1·4	106	28,29,30	73·0	−0·2	63	1	84·3	98·8	68·3	72·1	16·4	−1·3	14·8	39	
Chanda ...	634	986·0	−1·2	980·7	105·9	+0·5	111	24,29,30	75·7	−0·2	67	12	87·9	104·5	66·0	68·9	11·8	-5·3	8·0	27	−
Jagdalpur ...	1815	947·2	−1·4	942·4	101·2	+2·0	105	25,27,30	70·4	−0·4	60	1	82·6	95·6	68·2	68·2	17·7	−4·4	12·4	47	
Madhya Pradesh West																					
Buldhana ...	2133	936·7	...	933·3	99·5	...	105	27,29	78·1	...	71	1	82·3	97·8	64·2	68·1	13·0	...	11·4	35	
Akola ...	925	976·3	−1·1	971·2	106·1	+0·6	111	29	76·5	+1·6	69	19	84·7	104·0	64·9	70·8	12·1	+0·2	10·7	32	
Amravati ...	1213	966·8	-0·7	962·1	104·5	+0·2	110	29	77·9	+1·4	71	12	85·3	102·9	64·7	71·5	11·6	-0·9	12·1	28	
Yeotmal ...	1481	958·1	...	953·6	104·9	...	110	29	77·2	...	71	12	88·5	101·6	64·8	69·0	10·3	...	9·5	26	
Khandwa ...	1044	972·4	-1·0	967·7	104·8	+0·4	110	28,29,30	74·3	-0·4	69	4 days	85·1	102·1	64·0	69·4	10·9	-0·6	9·7	27	
Hoshangabad ...	992	974·2	-1·0	969·4	103·9	+1·1	110	29	73·4	-0·1	67	11,12,19	83·2	101·8	63·4	69·9	11·5	+0·8	10·5	32	
Sagar ...	1808	946·9	-0·7	943·2	98·1	-1·6	105	29,30	73·4	-0·1	63	6	82·9	95·8	58·3	62·4	6·4	-3·1	5·7	17	
Jabalpur ...	1289	964·2	-0·4	959·8	101·8	+1·2	109	30	67·2	-1·2	61	1,12	83·5	98·9	62·6	67·6	10·0	-2·1	9·0	26	
Seoni ...	2027	940·2	-0·5	936·2	99·7	+0·2	107	29	70·2	-0·4	62	13	82·7	96·1	62·3	67·5	11·3	-0·8	11·4	30	

(e) Mean of 26 days (d) Mean of 27 days (c) Mean of 28 days.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Rajasthan, West
0·7	−0·8	0·7	0	−0·30	0	...	0	−0·9	...	...	2	6	6	4	3	0	1	4	4	4	1	0	0	1	5	4	13	2	Sri Ganganagar
0·8	−0·6	1·1	0	−0·19	0	...	0	−0·5	4·0	−0·7	0	5	0	11	0	13	0	0	1	0	5	0	1	0	14	0	10	0	Bikaner
0·7	...	1·2	0	...	0	...	0	...	8·8	...	1	3	0	4	2	11	1	3	5	0	2	0	0	0	15	3	10	0	Jaisalmer
1·1	−0·6	1·7	0	−0·13	0	...	0	−0·5	5·0	−1·8	1	16	3	1	0	4	3	0	2	9	1	0	0	0	9	8	3	0	Jodhpur
1·0	...	1·3	0	−0·12	0	...	0	−0·3	8·4	...	1	2	5	8	3	7	2	2	0	2	1	0	1	3	7	11	5	0	Phalodi
1·1	−0·2	1·4	0	−0·19	0	...	0	−0·4	6·0	+0·2	2	0	0	1	2	3	2	16	4	1	2	0	2	0	11	3	10	1	Barmer
																													Rajasthan East
1·9	...	1·5	0·07	...	0·07	12	0	...	5·7	...	2	2	7	6	1	6	1	1	4	0	1	0	0	0	5	11	13	0	Sikar
1·2	−0·2	1·8	0	−0·17	0	...	0	−0·5	4·9	+0·3	3	5	8	4	0	0	2	3	5	5	1	0	0	0	1	9	14	0	Jaipur
1·2	−0·2	1·5	0	−0·15	0	...	0	−0·4	6·0	+1·5	3	7	0	2	3	6	3	0	6	1	0	0	0	0	9	11	8	1	Ajmer
1·2	−0·2	1·4	0	−0·21	0	...	0	−0·5	8·8	+1·1	0	0	0	0	1	1	8	2	18	0	1	0	0	0	0	16	7	6	Kotah
1·0	−0·1	2·0	0	−0·27	0	...	0	−0·5	3·9	+0·4	1	2	2	2	0	2	4	3	14	2	4	1	1	0	2	11	9	0	Jhalawar
0·8	...	1·5	0	−0·11	0	...	0	−0·2	3·7	...	5	1	2	0	2	1	2	7	10	0	2	0	1	2	11	6	8	0	Udaipur
																													Madhya Bharat
1·4	...	1·5	0	...	0	...	0	...	2·7	...	2	1	0	1	4	1	5	11	5	2	1	1	1	0	3	7	15	0	Gwalior
1·2	+0·4	1·8	0	−0·29	0	...	0	−0·5	4·9	+1·3	6	5	3	2	1	5	3	0	5	1	1	2	0	1	1	9	15	0	Guna
2·0	+1·3	2·3	0	−0·12	0	...	0	−0·3	5·8	−0·1	2	7	1	0	0	5	6	4	5	5	5	0	0	0	3	8	7	2	Neemuch
1·3	...	2·3	0	...	0	...	0	...	6·4	...	5	15	1	0	1	5	1	0	2	3	0	0	2	3	8	12	6	0	Ratlam
0·9	−0·5	1·8	0	−0·13	0	...	0	−0·3	7·2	+0·3	2	4	3	1	3	0	11	5	1	3	1	2	0	1	3	14	6	0	Indore
1·1	−0·3	1·6	0·06	−0·16	0·06	3	0	−0·7	4·8	+1·0	3	5	3	5	0	3	5	5	1	2	1	0	0	0	5	8	11	3	Bhopal
1·0	−0·4	1·8	0·01	−0·21	0·01	3	0	−0·7	7·1	+0·3	6	3	5	4	2	2	2	3	3	8	2	0	1	1	0	5	12	1	Bairagarh
1·5	...	1·8	0	...	0	...	0	...	4·6	...	3	1	0	0	2	2	5	6	11	1	1	1	0	0	2	11	14	0	Madhosagar
																													Vindhya Pradesh
1·0	−0·7	1·9	0	−0·17	0	...	0	−0·3	2·6	+0·3	1	0	1	1	0	11	5	3	8	5	2	0	0	0	2	11	7	3	Nowgong
0·8	−0·7	1·2	0	−0·28	0	...	0	−0·7	3·3	−0·4	2	0	0	1	4	9	6	4	4	5	0	0	1	0	2	3	19	0	Sutna
1·8	−0·1	2·7	0·04	−0·42	0·02	3, 13	0	−0·9	2·7 (b)	−0·8	5	0	2	2	0	0	3	4	14	5	1	0	0	0	1	9	11	3	Umaria
																													Madhya Pradesh East
0·6	...	0·9	0·06	...	0·06	9	0	...	2·6	...	4	4	0	3	4	6	1	2	6	3	2	0	1	0	4	0	3	18	Gondia
0·8	−1·2	2·7	0	−0·97	0	...	0	−2·1	4·1	−0·2	6	1	0	0	6	2	2	11	2	9	2	0	1	3	1	4	10	0	Pendra
1·0	...	1·4	0	...	0	...	0	...	4·4	...	10	3	4	0	2	1	2	5	3	6	3	0	0	0	2	16	2	1	Champa
1·0	−0·7	1·8	0	−0·64	0	...	0	−1·7	3·4	−1·7	6	0	1	0	4	3	5	4	7	5	1	0	0	0	3	5	6	10	Raipur
2·5	+0·1	2·4	0	−1·17	0	...	0	−2·3	2·0	−1·5	0	0	0	0	0	0	1	0	29	5	1	0	0	0	1	0	9	14	Kanker
1·3	−0·4	2·1	0	−0·78	0	...	0	−1·8	2·8	−0·1	0	2	0	7	0	7	1	5	8	0	0	0	4	0	1	1	6	18	Chanda
0·7	−1·1	3·2	1·04	−0·74	0·60	11	2	−1·5	3·6	+0·6	0	2	0	4	0	14	0	2	8	1	6	0	6	0	9	2	4	2	Jagdalpur
																													Madhya Pradesh West
3·0	...	1·8	0·11	...	0·04	2, 9	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Buldhana
1·6	+0·1	2·4	0·06	−0·14	0·06	9	0	−0·5	5·4	+0·9	0	1	0	3	1	2	6	14	3	1	2	0	3	2	2	6	14	0	Akola
1·7	+0·2	2·3	0·04	−0·30	0·04	9	0	−0·8	6·2	+1·6	0	25	0	0	0	3	0	2	0	0	17	0	1	0	6	0	6	0	Amravati
1·5	...	2·6	0·03	...	0·03	9	0	...	7·5	...	6	6	2	0	2	2	5	7	0	2	2	1	3	1	6	12	3	0	Yeotmal
1·9	+0·7	2·1	0·03	−0·08	0·03	8	0	−0·3	6·3	+1·1	2	3	0	3	1	1	11	7	2	5	1	0	0	0	3	10	11	0	Khandwa
1·6	+0·3	2·2	0·02	−0·11	0·02	3	0	−0·3	3·0	+0·5	1	3	2	0	1	2	1	0	20	1	1	0	0	4	7	4	2	11	Hoshangabad
1·7	+0·3	2·2	0	−0·21	0	...	0	−0·5	10·9	+0·4	3	6	5	1	3	4	4	4	0	3	8	2	0	0	3	6	7	1	Sagar
1·2	−0·1	1·9	0·05	−0·27	0·05	3	0	−0·8	3·2	+0·8	0	4	0	3	7	5	1	1	9	4	4	0	1	0	3	6	7	5	Jabalpur
0·9	−0·6	2·4	0·15	−0·45	0·10	8	1	−0·7	3·9	+0·5	3	3	0	0	1	1	0	2	20	8	2	0	2	5	1	7	5	0	Seoni

(b) Mean of 29 days

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I.S.T. (0300 HRS. G.M

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Rela hum	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	2
Madhya Pradesh West (Contd.)																					
Chhindwara ...	2,248	933·0	...	929·3	98·3	...	105	30	69·9	...	62	1	82·3	95·4	60·2	64·1	8·9	...	7·7	25	
Betul ...	2,144	936·8	...	932·8	98·8	...	105	29	68·9	...	62	11,12,13	82·9	95·4	62·5	65·9	11·1	...	9·8	29	
Nagpur ...	1,010	973·3	-1·1	968·4	104·9	+0·7	111	30	74·7	+0·2	67	1	87·7	102·6	66·8	72·0	13·0	-2·4	12·9	29	
Gujarat																					
Deesa* ...	466	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Surat ...	39	1008·2	-0·4	1003·8	100·4	+1·3	109	7,8,24	73·7 (b)	0	68	4,5	81·3	93·5	71·7	75·6	22·3	-1·4	22·1	64	
Ahmedabad ...	163	1003·3	-0·9	998·8	102·4	-1·4	108	27	75·2	+0·7	71	10,16	80·3	100·7	63·8	67·2	12·8	-4·8	7·6	39	
Dohad ...	1,093	971·1	...	967·4	101·7	+0·3	109	28	73·6	-0·5	66	5	81·7	99·0	63·9	69·0	12·3	-2·0	10·6	35	
Baroda ...	115	1004·6	...	1000·2	104·8	+1·9	113	27	70·2	+1·4	58	4	80·1	102·9	67·2	71·9	16·9	+0·4	12·6	50	
Saurashtra & Kutch																					
Bhuj ...	343	997·7	+0·1	994·3	99·2	-0·6	106	28	69·8	-1·5	61	4	77·7	97·1	65·7	67·3	16·2	-4·7	9·4	51	
Dwarka ...	37	1008·4	-0·6	1006·0	85·6	+0·5	92	5,7	74·9	-1·5	69	5	78·2	82·0	73·3	75·6	25·8	-1·5	27·3	79	
Jamnagar ...	60	1007·9	+0·2	...	96·8	+1·2	102	27	71·4	+1·1	66	10	80·6	...	74·3	...	26·1	+2·4	...	75	
Rajkot ...	432	994·0	-0·9	990·2	102·3	+0·5	108	27,28,29	68·3	-0·2	58	3	76·4	100·0	68·3	75·1	20·0	-0·5	19·1	66	
Veraval ...	26	1008·4	-0·9	1005·5	92·4	...	107	9,27	69·4	...	60	4	77·9	82·2	68·2	75·5	19·8	...	27·4	62	
Bhavnagar ...	55	1007·0	-1·0	1002·9	103·0	+1·0	111	29	74·7	+1·2	62	3,4	78·3	99·4	62·5	69·7	12·2	-6·2	11·3	39	
Konkan																					
Dahanu ...	15	1008·4	...	1005·5	87·2	...	93	8	73·8	...	70	1	81·0	86·3	75·3	78·9	27·4	...	30·4	76	
Bombay ...	35	1008·1	-0·9	1004·9	89·0	-0·1	93	28	76·4	+0·3	72	12	82·4	85·2	75·7	77·3	27·3	0	28·4	72	
Alibag ...	23	1008·8	-1·1	..	87·1	-0·5	91	28,29	74·8	-0·5	71	13	80·6	...	76·7	...	29·3	+3·5	...	83	
Harnai ...	66	1006·5	...	1004·2	85·0	...	88	28,29	73·1	...	64	24	81·1	82·9	77·1	79·9	30·0	...	33·5	80	
Devgad ...	117	1005·1	...	1002·3	88·6	...	92	28	78·1	...	75	5 days	80·2	85·9	75·9	78·1	28·6	...	29·3	81	
Vengurla ...	29	1008·6	...	1005·0	90·2	...	96	17	74·8	...	71	6,14,15	81·6	86·5	75·7	77·5	27·6	...	28·1	75	
Marmagao ...	202	1002·4	-0·9	999·2	87·3	-0·3	90	30	78·3	-0·7	75	16	82·2	84·4	76·0	76·6	28·0	-0·1	28·3	74	
Honavar ...	85	1007·4	...	1003·7	90·4	...	93	28,30	77·6	...	71	14	81·7	86·6	76·5	78·7	28·8	...	30·0	78	
Deccan (Desh)																					
Jalgaon ...	660	985·7	...	981·4	107·1	...	113	28	75·7	...	71	23	84·6	105·4	66·7	72·7	14·3	...	12·6	36	
Malegaon ...	1,432	960·2	-1·0	955·8	104·0	+0·8	109	27,28	70·8	-0·1	64	15	85·6	99·9	63·5	68·3	10·1	-4·8	9·3	24	
Deolali ...	1,874	945·8	...	...	100·1	...	106	28,29	66·7	...	59	11	81·7	...	63·5	...	12·7	...	...	35	
Ahmednagar ...	2,154	936·8	-0·9	932·2	101·9	+1·6	107	26,29	71·2	+1·4	61	14,15	82·4	95·5	63·8	70·0	12·7	-1·3	14·7	34	
Poona ...	1,834	947·2	-1·1	942·9	101·5	+0·6	107	25,26	68·1	-0·2	59	16	77·5	95·5	65·0	70·7	16·0	+0·1	15·5	50	
Sholapur ...	1,570	955·6	-0·9	950·3	105·2	+1·7	109	25,26,30	77·0	+1·7	69	13	85·6	102·9	65·5	70·8	13·3	-1·8	12·7	32	
Miraj ...	1,817	947·4	-1·5	942·5	102·4	+3·2	106	23,24,26	70·7	+0·7	61	16	78·0	99·3	67·6	68·7	18·8	-1·4	11·5	58	
Kolhapur ...	1,885	945·7	...	941·3	100·2	...	105	28	70·6	...	64	13,15,16	76·8	93·2	67·3	71·7	18·9	...	17·8	61	
Bijapur ...	1,950	942·1	-1·4	938·1	102·0	+1·3	106	26	75·0	+0·5	66	13	83·3	100·5	67·4	70·7	16·4	-1·8	13·6	43	
Belgaum ...	2,568	924·1	-0·5	920·3	96·0	+0·2	101	28	65·8	-1·4	59	15	75·2	86·5	66·5	72·6	18·7	+0·2	21·5	63	
Gadag ...	2,131	937·7	-1·0	933·0	100·7	+1·9	104	28	72·8	+0·4	67	15	79·1	97·5	72·1	75·1	24·1	+2·3	20·5	67	
Hyderabad, North																					
Aurangabad ...	1,905	944·9	-1·1	940·4	102·3	+1·0	107	26,29	76·7	+3·0	69	16	84·5	100·6	66·3	71·4	14·7	+3·0	14·4	27	
Parbhani ...	1,350	961·2	...	956·3	104·9	...	110	30	76·3	...	69	15	86·7	102·5	70·5	77·9	18·9	...	20·1	44	
Ramagundam ...	527	990·1	...	985·0	104·6	..	110	27,29	78·5	...	71	1,30	86·8	103·2	72·1	73·7	20·2	...	15·0	43	
Nizamabad ...	1,250	965·1	-1·7	960·5	102·9	-0·7	109	30	76·1	-0·2	70	3,11,12	82·9	101·7	67·5	71·6	16·0	-1·9	12·8	42	
Bidar ...	2,178	935·1	...	930·9	100·6	+1·9	105	24,25	77·9	+1·9	72	1,2,3	84·3	97·7	67·7	70·5	16·4	-0·4	14·4	42	

* Data not reliable. (b) Mean of 29 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Madhya Pradesh West (Contd.)
1·5	...	2·4	0·28	...	0·28	8	1	...	4·4	...	9	3	2	0	2	1	4	6	3	6	2	1	1	2	1	8	9	0	Chhindwara
1·6	...	2·9	0·05	...	0·05	8	0	...	3·6	...	2	2	2	3	2	3	5	5	6	7	2	0	0	1	2	8	9	1	Betul
1·5	-0·3	2·5	0	-0·60	0	...	0	-1·3	4·3	...	7	7	3	1	0	1	2	7	2	4	3	3	5	1	3	5	4	2	Nagpur
																													Gujarat
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Deesa *
1·8	-0·1	1·1	0	-0·03	0	...	0	-0·1	5·4	+1·2	7	3	1	4	5	5	1	2	2	0	0	0	1	0	14	0	15	0	Surat
0·3	-0·8	0·7	0	-0·05	0	...	0	-0·1	4·6	+0·7	7	5	3	0	2	2	4	7	0	2	1	0	0	0	5	12	10	0	Ahmedabad
1·0	-0·3	0·6	0	-0·02	0	...	0	0	10·9	+5·2	2	3	5	2	0	5	11	2	0	2	0	0	1	0	17	5	5	0	Dohad
0·6	-0·3	0·7	0	0	0	...	0	0	2·9	-0·4	2	4	0	0	2	5	4	2	11	5	1	0	0	1	3	7	9	4	Baroda
																													Saurashtra & Kutch
0·9	-0·3	0·6	0	-0·07	0	...	0	-0·1	5·9	-1·5	1	1	0	0	0	5	4	4	15	2	1	0	0	0	7	10	7	3	Bhuj
1·2	-0·7	0·7	0	-0·03	0	...	0	0	11·4	+1·8	14	0	0	0	0	4	9	13	0	3	0	0	0	0	3	12	12	0	Dwarka
0·9	-0·4	...	0	-0·02	0	...	0	0	4·5	-5·5	0	0	0	0	0	12	10	1	7	...	...	...	...	...	..	...	...	...	Jamnagar
1·3	-1·2	0·4	0	-0·03	0	...	0	-0·1	10·0	+1·9	4	3	0	0	0	5	7	8	3	4	5	0	0	0	0	7	14	0	Rajkot
1·1	-1·0	0·7	0	0	0	...	0	0	12·2	...	15	0	0	0	0	2	1	9	3	0	0	0	0	0	2	16	11	1	Veraval
0·4	-0·9	0·8	0	-0·10	0	...	0	-0·3	5·8	+0·1	6	1	0	0	2	5	7	8	1	2	3	6	4	13	1	1	0	0	Bhavnagar
																													Konkan
2·7	...	0·8	0	...	0	...	0	...	8·3	...	2	1	13	12	1	0	1	0	0	3	0	0	0	0	4	18	5	0	Dahanu
2·0	-0·9	0·7	0	-0·03	0	...	0	0	6·3	-0·8	6	6	2	3	7	3	0	0	3	5	0	0	0	0	1	10	13	1	Bombay
1·0	-1·9	...	0·06	+0·05	0·06	27	0	0	5·3	-1·5	6	2	4	6	1	0	0	1	10	...	...	...	...	...	...	...	...	...	Alibag
1·0	..	0·1	0·05	...	0·05	24	0	...	9·0	...	3	1	1	12	0	2	2	0	0	0	0	0	1	0	11	4	14	0	Harnai
2·8	...	1·6	0	...	0	...	0	...	8·8	...	2	7	13	4	0	2	0	2	0	1	0	0	0	0	4	11	14	0	Devgad
3·3	...	1·8	0	...	0	...	0	...	...	...	3	1	1	2	0	1	0	0	22	0	0	0	0	0	9	19	1	1	Vengurla
4·3	0	3·8	0	-1·32	0	...	0	-0·8	7·3	+0·8	6	6	3	2	3	4	5	1	0	0	0	0	0	0	4	18	8	0	Marmagao
3·8	...	3·6	0	-0·74	0	...	0	-1·1	3·0	...	0	3	15	5	0	1	1	1	4	0	0	1	0	0	3	18	8	0	Honavar
																													Deccan (Desh)
1·3	...	1·4	0	-0·07	0	...	0	-0·2	6·3	...	0	2	5	1	0	3	15	3	1	2	2	0	0	0	5	1	20	0	Jalgaon
0·8	-0·3	1·6	0·09	-0·03	0·05	9	0	-0·3	5·1	-1·2	0	1	0	0	0	1	2	10	16	3	4	1	1	0	0	7	12	2	Malegaon
0·9	...	...	0·01	...	0·01	8	0	...	5·9	...	1	1	1	1	3	9	2	2	10	...	...	...	...	...	...	...	...	...	Deolali
0·9	-0·3	2·3	0·27	-0·13	0·15	1	2	+0·9	5·0	-1·1	6	2	0	2	0	0	0	8	12	4	2	0	2	2	2	1	12	5	Ahmednagar
1·2	-0·5	1·9	1·48	+0·89	1·05	27	3	+1·7	2·6	-3·8	0	0	0	0	0	3	3	0	24	1	0	1	0	0	3	13	11	1	Poona
1·3	-0·7	2·7	0·25	-0·28	0·20	25	1	-0·2	6·3	-0·1	6	6	0	4	1	5	4	2	2	7	2	1	3	2	0	8	4	3	Sholapur
1·3	-0 5	3·3	0·40	-1·59	0·20	1,27	2	-1·1	7·0	+1·0	0	3	5	1	0	3	11	6	1	2	0	6	5	2	3	9	1	2	Miraj
0·8	...	1·3	0	...	0	...	0	...	8·5	...	0	1	0	0	0	3	18	1	7	0	0	1	0	1	3	22	1	2	Kolhapur
1·1	-0·7	2·8	0·04	-0·81	0·02	24,28	0	-1·8	4·9	+0·3	7	3	0	1	1	6	4	6	2	5	3	4	4	1	2	0	6	5	Bijapur
0·8	-1·5	1·2	1·34	-0·41	0·51	28	4	+0·7	4·4	+0·8	1	1	1	1	0	0	22	1	3	0	0	1	0	0	3	24	2	0	Belgaum
2·3	0	3·3	0·03	-1·40	0·06	29	0	-2·8	6·3	+0·2	2	0	2	2	2	10	9	2	1	2	4	5	5	2	2	4	4	2	Gadag
																													Hyderabad North
2·0	-0·1	3·3	0·02	-0·50	0·02	9	0	-1·3	8·1	+0·6	5	5	0	1	2	7	6	1	3	4	2	0	1	3	4	10	6	0	Aurangabad
1·9	...	3·0	0	-0·42	0	...	0	-1·2	...	...	0	0	1	0	0	0	25	0	4	3	1	0	0	0	0	24	0	2	Parbhani
1·3	...	1·4	0	...	0	...	0	...	4·0	...	3	2	3	7	13	0	1	0	1	0	2	1	9	13	0	2	1	2	Ramagundam
0·5	-1·9	0·7	0	-0·85	0	...	0	-2·0	2·9	-0·3	6	1	0	0	2	0	3	0	18	4	1	0	0	0	0	0	2	23	Nizamabad
1·2	-0·6	2·8	0·90	-0·17	0·90	26	1	-1·5	7·4	+1·0	2	2	0	0	6	8	4	8	0	3	8	7	3	2	3	0	4	0	Bidar

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relativ humidit %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Hyderabad, South																					
Gulbarga ...	1,503	957·1	-1·2	952·1	103·8	+0·4	108	26	77·7	+1·4	68	15	85·5	102·0	68·1	73·9	16·4	-1·4	17·1	39	-6
Raichur ...	1,311	963·7	-1·1	959·1	103·6	+1·1	107	5 days	79·6	+0·8	75	4 days	84·9	101·2	71·8	75·5	20·7	-0·7	18·4	51	0
Hyderabad (Begumpet) ...	1,778	948·4	-0·8	944·3	102·7	+2·2	107	25,30	74·8	-0·3	65	8	84·8	98·8	68·0	70·4	16·5	-5·0	13·8	41	-13
Hanamkonda ...	881	978·1	-1·4	973·5	102·9	+2·2	107	6 days	77·0	-0·1	72	2,3	84·1	100·5	71·3	70·2	20·4	-2·4	11·5	52	-6
Khammameth ...	367	995·9	...	990·8	103·1	...	107	4 days	...	...	...	...	83·1	101·7	77·5	78·8	29·7	...	23·0	77	...
Coastal Andhradesa																					
Nellore ...	66	1003·1	-1·2	1002·1	100·7	+1·3	109	15,16	76·7	-0·7	70	3	85·5	89·9	76·7	78·6	27·4	-2·4	28·3	66	-5
Ongole ...	38	1007·1	...	1003·0	96·9	...	109	15	76·8	...	69	2	84·4	89·0	78·8	80·7	31·0	...	32·0	77	...
Masulipatam ...	10	1008·4	-1·6	1004·4	93·9	-1·3	98	14,26	77·2	-0·5	70	8	84·0	87·1	79·5	79·6	32·4	+0·4	31·1	81	+5
Kakinada ...	26	1008·2	-1·1	1003·9	96·0	+0·5	101	26	77·6	-0·9	70	1	84 8	90·0	78·7	80·4	30·7	+0·2	31·0	75	+2
Visakhapatnam ...	126	1004·2	-1·3	1000·6	88·6	-1·0	94	26	78·6	+0·4	70	1	84·1	85·1	76·4	78·1	27·6	-0·7	29·7	69	0
Calingapatam ...	19	1007·4	-1·5	1003·7	91·0	-1·5	96	8,9	77·0	-1·2	68	1,2,3	81·2	85·7	76·7	79·7	29·3	-1·2	31·9	80	+8
Rentachintala ...	348	996·6	...	991·2	105·1	+3·6	111	30	78·3	-0·9	70	8	85·9	103·0	72·7	71·3	21·4	-3·0	11·8	57	-6
Rayalaseema																					
Cuddapah ...	428	993·7	-1·1	989·0	105·6	+0 8	111	26	81·0	+0·1	72	2	90·5	101·7	76·6	80·7	24·9	-0·8	26·2	51	-4
Bellary ...	1,473	958·3	-1·2	953·8	102·0	-0·7	105	23,27,28	78·2	+0·8	71	3	84·0	100·3	68·5	69·7	16·8	-3·1	11·0	42	-8
Kurnool ...	923	976·9	-0·9	971·6	103·8	+0·2	107	10 days	75·9	-3·1	66	8	86·8	101·7	69·5	70·7	16·9	-4·8	11·6	39	-12
Anantapur ...	1,147	969·3	...	964·1	102·6	...	106	23,30	75·5	...	65	3	84·2	100·7	72·5	74·5	22·0	...	17·2	54	...
Tamilnad																					
Pamban ...	37	1007·8	-0·8	1004·3	89·3	-1·8	92	5 days	80·3 (b)	+0·6	75	7	84·6	85·4	78·5	78·7	30·5	-0·9	30·5	75	-1
Mathurai ...	437	994·2	-1·0	989·7	98·2	+0·4	102	4 days	76·4	-0·3	72	1,20	84·2	94·7	76·1	74·7	27·1	-0·9	20·3	68	0
Nagapattinam ...	31	1008·3	-0·8	1004·5	90·6	-1·4	99	14,15	79·9	+0·2	74	1,9	85·4	86·2	77·9	79·2	29·2	-1·6	30·9	70	-3
Tiruchi ...	295	999·5	-1·0	994·2	98·8	-1·3	105	16	77·1	-0·9	71	1,2	83·7	96·5	76·1	74·9	27·3	-1·8	19·8	69	-4
Coimbatore ...	1,341	963·9	-0·8	959·4	96·6	+0·1	101	23,25,26	73·7	+0·1	70	1,2,5	79·4	92·6	72·5	72·2	24·6	-2·5	17·7	70	-7
Salem ...	913	978·1	-1·0	972·5	100·4	+0·2	105	16	77·1	+0·6	69	1,2	82·2	97·8	72·8	71·5	22·6	-5·2	14·4	62	-9
Kallakurichi ...	416	994·8	...	989·8	99·9	...	107	15	75·9	...	69	1	82·0	97·4	74·6	71·7	25·9	...	14·9	69	..
Cuddalore ...	39	1007·9	-1·0	1003·9	92·2	0	102	16	77·2	-0·5	70	1,10	84·7	86·0	77·1	78·3	28·4	-2·9	29·6	70	-[illegible]
Vellore ...	703	985·1	-0·7	980·2	99·9	+1·1	106	14,15	75·3	-0·9	64	2	82·3	97·9	72·8	71·8	23·3	-3·8	14·8	62	-[illegible]
Madras ...	51	1007·5	-0·7	1003·4	95·6	+0·1	103	15,16	78·0	-0·1	71	1,2,3	84·7	88·0	77·4	77·7	28·8	-0·9	27·5	71	(
Arogyavaram ...	2,299	932·2	...	928·2	96·5	...	100	6 days	71·8	...	65	3	80·0	93·4	65·1	65·4	15·1	...	10·0	44	..
Malabar And South Kanara																					
Mangalore ...	72	1007·3	-0·7	1003·9	89·7	-1·5	91	7 days	78·9	+0·4	73	14	83·5	85·8	76·8	77·6	28·4	+0·1	28·6	73	+[illegible]
Kozhikode ...	27	1008·6	-0·8	1004·9	91·9	+0·9	93	9 days	79·1 (b)	+0·7	76	2,3,14	83·9	88·6	77·4	80·5	29·5	-0·3	32·2	73	-
Palghat ...	319	998·8	...	993·9	98·3	...	107	26	78·0	...	73	10	82·7	92·2	76·7	78·9	28·7	...	27·6	75	..
Mysore																					
Chitaldrug ...	2,405	933·2	-1·4	934·0	97·6	+0·3	101	24	72·0	-0·9	65	14	77·3	95·3	68·2	66·7	19·8	-1·2	9·0	63	+
Hassan ...	3,149	905·3	...	901·5	93·2	+0·8	97	27	67·0	-0·3	61	14,15	71·9	89·9	67·1	70·8	20·7	-0·5	18·0	78	+
Bangalore ...	3,021	909·4	-0·7	905·3	93·5	+1·0	97	17,30	70·4	+1·3	63	3	75·6	90·6	67·1	63·8	19·2	-2·6	9·3	63	-
Mysore ...	2,518	925·4	-1·1	921·1	95·2	+0·6	98	4 days	70·2	-0·2	66	14,15	76·3	93·3	69·9	67·6	23·3	-0·6	13·6	72	(

(b) Mean of 29 days.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.									
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Hyderabad South,
1·1	−0·3	2·3	0	−0·83	0	...	0	−2·1	7·2	0	5	4	4	1	3	4	5	3	1	3	2	9	6	1	4	1	4	0	Gulbarga
1·4	−0·3	2·2	0	−0·64	0	...	0	−1·4	6·5	+0·5	0	0	1	6	3	7	2	10	1	0	3	8	8	1	0	3	7	0	Raichur
1·3	−1·3	2·5	0	−1·17	0	...	0	−1·9	4·8	+0·2	1	0	0	4	1	4	3	2	15	2	1	8	7	1	0	0	3	8	Hyderabad (Begumpet)
1·1	−1·5	1·6	0	−0·91	0	...	0	−1·6	6·0	+0·1	1	1	1	11	13	1	1	1	0	3	2	0	10	7	2	2	3	1	Hanamkonda
1·7	...	1·3	...	...	...	...	...	...	6·9	...	0	0	2	18	7	2	0	0	1	0	1	9	13	2	2	0	2	1	Khammameth
																													Coastal Andhra desa
1·8	−1·2	2·3	0	−0·48	0	...	0	−0·6	5·4	−0·2	0	0	0	6	14	1	1	0	8	0	0	8	21	1	0	0	0	0	Nellore
2·1	...	1·8	0	...	0	...	0	...	5·9	...	0	0	1	5	10	5	0	0	9	0	0	3	25	2	0	0	0	0	Ongole
2·7	−0·7	1·5	0	−0·69	0	...	0	−0·9	6·9	+1·1	2	1	0	4	14	1	0	1	7	0	0	2	15	13	0	0	0	0	Masulipatam
2·2	−1·9	0·5	0·05	−0·59	0·05	11	0	−1·0	5·2	+0·1	0	1	0	1	0	26	1	0	1	0	0	0	18	0	12	0	0	0	Kakinada
1·3	−2·2	2·3	0	−0·71	0	...	0	−1·3	6·1	+0·6	0	0	1	1	3	11	11	2	1	0	0	0	0	8	32	0	0	0	Visakhapatnam
3·5	+0·9	3·3	0·50	−0·26	0·40	15	1	−0·5	9·6	+1·3	0	0	0	0	9	10	6	5	0	0	0	0	0	14	15	1	0	0	Calingapatam
2·0	−2·4	1·9	0	−1·19	0	...	0	−2·7	5·1	−1·5	0	1	1	3	7	4	4	0	10	1	1	11	7	3	0	5	0	2	Rentachintala
																													Rayalaseema
1·0	−1·2	1·6	0	−0·57	0	..	0	−1·1	5·6	−1·4	1	0	4	1	4	0	3	1	16	0	0	20	1	0	0	1	0	8	Cuddapah
4·0	+1·9	3·2	0·02	−0·82	0·02	11	0	−1·9	3·8	−0·1	1	0	3	1	3	1	1	9	12	1	3	5	4	1	3	4	5	4	Bellary
1·0	−0·9	2·0	0	−0·67	0	...	0	−1·5	4·7	0	0	0	2	6	3	6	4	3	6	1	2	5	7	4	3	2	3	3	Kurnool
1·2	...	2·0	0	−0·64	0	...	0	−1·3	7·1	...	0	0	0	1	6	6	11	0	6	3	4	13	2	1	0	1	3	3	Anantapur
																													Tamilnad
3·5	+0·7	4·8	1·09	−0·75	0·89	9	2	−1·2	7·3	+1·2	2	2	3	8	9	5	0	1	0	2	4	3	4	14	3	0	0	0	Pamban
3·8	−0·3	4·2	0·51	−1·65	0·28	10	2	−1·1	3·1	+0·2	6	3	3	0	0	0	1	5	12	0	3	4	9	2	2	1	0	9	Mathurai
5·1	+1·3	3·9	0·53	−0·58	0·53	9	1	−0·3	7·9	+1·6	1	3	3	7	5	6	4	0	1	0	4	6	15	3	1	0	0	1	Nagapattinam
3·6	+0·6	3·7	0	−1·80	0	...	0	−2·0	6·0	+0·5	3	5	1	0	3	3	4	5	6	0	1	13	5	5	3	2	1	0	Tiruchi
1·7	−1·4	2·3	0·69	−0·89	0·43	12	2	−1·2	4·9	+2·3	3	7	4	2	6	6	0	1	1	0	4	7	3	8	6	1	1	0	Coimbatore
2·2	−0·5	3·0	0	−1·93	0	...	0	−3·6	5·6	+1·7	0	3	10	1	4	4	4	0	4	0	1	12	3	8	1	1	0	4	Salem
6·6	...	6·8	0·08	...	0·08	10	0	...	...	...	0	2	0	16	1	0	0	0	11	0	11	1	13	0	1	0	0	4	Kallakurichi
3·6	+0·2	2·0	0	−0·98	0	...	0	−1·1	7·3	+2·2	1	4	2	9	4	9	0	0	1	0	4	14	12	0	0	0	0	0	Cuddalore
1·7	−0·5	2·0	0	−1·00	0	...	0	−1·5	5·1	+1·4	1	0	0	1	1	1	0	4	22	1	6	3	6	12	2	0	0	0	Vellore
3·9	+0·5	2·2	0	−0·61	0	...	0	−0·9	9·8	−1·3	0	1	0	5	9	8	4	3	0	0	1	5	23	0	1	0	0	0	Madras
3·5	...	3·5	0	...	0	...	0	...	5·0	...	1	0	2	7	9	3	3	2	3	4	6	10	7	0	0	0	3	0	Arogyavaram
																													Malabar And South Kanara
3·8	+0·3	4·0	0·20	−1·33	0·11	9	1	−1·3	4·8	−0·2	2	6	14	3	1	0	0	1	3	0	0	0	0	0	2	11	17	0	Mangalore
4·5	+0·6	5·0	0·92	−2·66	0·58	10	2	−2·2	9·5	+2·8	6	12	7	0	0	0	2	3	0	1	0	0	0	0	0	14	15	0	Kozhikode
2·5	...	3·0	0·11	...	0·08	10	0	...	6·2	...	0	0	4	1	0	1	22	0	2	1	1	3	0	0	3	22	0	0	Palghat
																													Mysore
2·1	−0·3	3·0	0·03	−0·94	0·03	30	0	−2·0	5·5	+1·2	0	0	2	1	0	7	15	0	5	0	0	17	2	0	0	1	2	8	Chitaldrug
2·4	−0·3	4·9	0·24	−1·96	0·15	20	1	−3·2	6·3	+2·4	1	0	3	1	1	5	13	3	3	0	0	12	3	0	3	10	1	1	Hassan
1·7	−0·9	3·4	0·10	−1·51	0·10	30	1	−1·6	6·4	+2·1	0	0	1	3	0	11	6	1	8	2	7	11	6	0	0	0	4	0	Bangalore
2·3	−1·1	4·0	0	−2·30	0	...	0	−4·6	6·0	+1·2	0	0	5	1	4	5	13	2	0	1	5	18	1	0	0	4	1	0	Mysore

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G.

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			h
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Travancore-Cochin																				
Fort Cochin ...	10	1009·4	−0·8	1005·7	87·7	−0·9	91	3	79·7	+1·0	74	10	84·0	86·0	77·9	78·8	29·9	−0·2	30·4	75
Alleppey ...	12	1009·1	...	1005·6	90·8	...	93	8,26,30	79·2	...	71	10	85·3	86·9	79·4	79·8	31·7	...	31·5	76
Trivandrum ...	211	1002·3	−0·7	999·0	89·9	...	94	1	77·2	...	73	7,8,10	81·3	85·6	76·7	77·9	29·3	−0·3	29·2	80
Nagercoil ...	195	1002·5	...	999·3	92·0	...	97	4days	77·5	...	73	5 days	82·8	85·4	76·3	77·5	28·0	...	28·6	73
Hill Stations Excluding Keshmir																				
Aijal ...	3,599	888·6	...	886·6	76·2	...	85	6,10	66·0	...	56	14,16	71·5	74·4	67·1	69·6	20·8	...	22·5	80
Shillong ...	4,921	848·4	−1·2	845·8	77·0	+2·9	83	9,23	57·8	+0·8	47	1	70·2	68·3	56·1	57·4	9·8	−2·9	11·6	40
Cherrapunji ...	4,309	868·1	−0·7	865·1	72·2	+0·9	76	5,27,28	58·9	0	52	14	66·5	67·2	61·6	62·4	16·6	+0·2	17·0	77
Darjiling ...	7,432	774·3	−1·7	772·1	63·5	+3·3	70	24	49·7	+0·9	40	13,14	56·7	55·9	53·6	52·5	13·0	+1·8	12·2	83
Kalimpong ...	3,965	877·1	−1·7	874·7	73·3	−0·8	77	4 days	58·7	−0·8	50	13	64·6	69·5	59·9	61·9	15·9	+1·3	15·9	77
Katmandu ...	4,388	865·7	...	862·4	85·3	+1·4	94	24	49·5	−3·0	44	9,11	63·7	75·6	55·4	59·4	11·4	+0·5	11·0	59
Muktesar ...	7,592	771·2	−1·4	769·8	69·8	+1·9	78	28	50·8	+0·5		1	51·8	63·2	43·9	47·0	4·7	−1·4	5·3	31
Mussoorec ...	6,699	795·3	...	794·4	68·5	−0·7	78	29,30	53·3	+0·5	47	3	60·5	63·6	50·6	54·1	9·0	+1·7	10·9	51
Simla ...	7,224	780·7	−0·7	779·9	64·4	−1·5	75	28	60·1	−0·5	43	14	57·5	61·2	43·2	46·4	4·6	−1·4	5·5	29
Abu ...	3,945	879·5	−0·8	877·8	84·1	−0·2	91	27	66·8	−1·5	58	5	72·2	81·9	53·0	56·7	6·0	−2·5	5·5	23
Pachmarhi ...	3,528	892·9	−1·0	890·3	92·8	+0·9	99	29	68·3	−0·5	60	11	80·3	89·8	58·3	62·2	7·3	−3·0	7·4	24
Mahabaleshwar ...	4,534	862·5	−1·3	860·6	87·5	+2·1	94	26	68·3	+2·2	62	15	75·4	78·5	61·9	70·1	13·5	+3·3	21·7	44
Mercara ...	3,781	885·1	−1·0	882·9	84·2	+0·5	91	27	63·6	−0·3	68	15	69·8	79·5	65·2	71·5	19·3	−0·3	22·6	79
Ko.'aikanal ...	7,688	771·7	−0·1	770·1	68·4	+0·2	73	30	52·9	−0·2	47	2	60·0	62·1	48·9	54·0	7·8	−2·9	11·4	47
Ootacamund ...	7,364	780·2	−0·6	778·5	74·2	+2·7	78	18,29,30	49·8	−1·7	43	7	60·6	67·5	50·6	56·3	9·0	−1·7	11·5	52
Coonoor ...	5,730	826·8	...	...	74·6	0	79	24	59·0	+2·5	49	4	67·3	...	60·1	...	15·2	+0·6	...	67
Tibet																				
Lhasa ...	12,090	622·2	...	...	63·7	...	70	24,26	34·7	...	24	2	48·4	...	47·3	...	10·8	...	...	93
Gyantse ...	13,110	624·1	...	...	60·7	+5·0	67	22	27·5	+1·7	18	14	46·6	...	33·3	...	2·3	−3·3	...	23
Ceylon																				
Colombo ...	24	1008·8	−1·0	1005·8	88·1	−0·7	93	1	76·0	+0·1	73	1,3,24	81·0	83·6	77·5	78·1	30·6	+0·6	30·4	85
Trincomalee ...	24	1008·6	−0·1	1005·2	88·3	−3·4	95	13,14	77·8	+0·2	73	9	82·4	84·6	76·9	78·9	29·1	−0·9	31·2	77
Hambantota ...	61	1006·7	−1·4	1003·9	88·3	+0·5	93	1	76·4	+0·3	74	7,24	81·8	83·8	77·1	78·5	30·8	+1·7	30·9	80
Mannar ...	12	1009·0	...	1005·4	89·7	...	95	29	77·9	...	69	9	82·6	85·9	78·1	79·2	30·9	...	31·1	81

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																			STATION
											0830 hrs. I.S.T.									1730 hrs. I.S.T.										
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Travancore-Cochin
5·1	+1·3	5·7	5·09	+0·15	4·21	10	4	−2·7	8·5	+3·2	3	15	9	1	0	0	0	1	1	0	0	0	0	0	1	18	11	0	Fort Cochin
4·1	...	4·4	13·86	...	10·80	10	5	...	8·1	...	4	10	6	1	0	0	1	8	0	0	0	0	0	0	1	15	14	0	Alleppey
3·9	0	4·5	4·69	+0·14	2·24	7	3	−3·9	5·1	+0·8	10	6	1	0	0	0	0	9	4	1	0	0	1	0	4	8	15	1	Trivandrum
4·1	...	5·1	7·10	...	2·13	10	6	...	6·2	...	3	4	1	1	0	1	9	8	3	1	1	0	2	2	3	16	4	1	Nagercoil
																													Hill Stations Excluding Kashmir
1·8	...	1·6	3·39	...	1·53	16	4	...	7·4	...	0	0	1	3	4	15	6	1	0	0	0	1	1	1	15	9	3	0	Aijal
1·9	−1·3	2·7	2·17	−2·93	0·68	15	5	−4·2	6·5	+1·3	0	0	0	1	3	19	3	0	4	0	0	0	0	3	16	2	0	9	Shillong
4·3	−0·5	2·9	19·99	−6·24	5·48	29	13	−3·0	9·4	+2·8	1	5	2	0	1	16	4	1	0	1	0	1	0	3	18	7	0	0	Cherrapunji
3·2	−0·7	2·8	3·86	−0·28	1·84	13	4	−3·5	6·9	+1·2	0	2	14	5	0	1	5	0	3	0	0	1	0	0	9	20	0	0	Darjiling
2·6	+0·1	2·6	2·73	0	1·05	16	4	−1·8	6·8	−1·1	1	0	0	1	0	0	2	17	9	0	1	0	27	2	0	0	0	0	Kalimpong
1·7	+0·4	2·5	0·91	−0·10	0·32	17	3	−0·2	0·9	−0·4	2	0	2	0	1	0	0	1	24	3	1	0	1	1	1	1	4	18	Katmandu
1·6	−0·6	1·9	0·10	−1·31	0·06	15	0	−3·3	9·1	+2·4	0	6	6	1	1	3	5	4	4	0	0	0	0	0	8	15	6	1	Muktesar
2·3	0	2·7	0·12	−1·21	0·12	3	1	−2·8	...	...	6	8	2	3	3	1	0	1	6	4	3	1	5	10	5	0	0	2	Mussooree
2·5	−0·2	3·2	0·48	−1·33	0·16	2	1	−3·7	2·2	−1·7	2	2	1	5	7	1	0	0	12	2	0	0	2	10	9	0	2	5	Simla
0·7	−1·2	1·6	0	−0·11	0	...	0	−0·3	4·9	−1·0	1	0	0	0	3	3	1	5	17	2	0	1	0	2	11	4	4	6	Abu
1·6	−0·2	2·1	0·24	−0·13	0·17	8	1	+0·1	3·0	−1·2	1	3	4	2	2	2	3	10	3	4	0	0	0	1	0	5	15	5	Pachmarhi
1·0	−1·1	1·9	0·13	−1·05	0·13	9	1	−0·5	7·4	+0·4	0	17	1	1	0	1	2	8	0	1	0	0	1	0	2	6	20	0	Mahabaleshwar
3·8	+0·1	3·6	0·58	−1·98	0·62	12	1	−4·1	5·2	+2·0	6	6	0	0	2	0	9	7	0	3	4	2	0	0	2	10	9	0	Mercara
3·2	+0·6	3·7	0·96	−3·86	0·71	12	2	−5·7	9·9	+2·4	4	10	7	7	0	0	0	2	0	3	6	7	11	2	0	0	0	1	Kodaikanal
2·0	−1·0	3·9	0·25	−2·79	0·14	9	2	−4·5	1·6	−1·7	1	5	10	0	0	0	0	0	14	2	7	12	1	0	0	1	0	7	Ootacamund
3·9	−0·9	...	1·16	−4·71	0·58	8	2	−4·9	3·6	+0·4	6	3	0	10	5	2	0	3	1	...	...	...	...	...	...	...	...	...	Coonoor
																													Tibet
0·4	...	...	0	...	0	...	0	...	0	...	0	0	0	0	0	0	0	0	30	...	...	...	...	...	...	...	...	...	Lhasa
0·5	−1·9	...	0·07	−0·13	0·07	14	0	−0·7	6·6	+1·8	2	0	2	2	0	5	3	3	13	...	...	...	...	...	...	...	...	...	Gyantse
																													Ceylon
5·6	+0·7	6·2	4·54	−4·89	1·30	8	10	−0·9	...	...	0	2	8	6	1	6	3	1	3	2	1	0	2	0	6	15	4	0	Colombo
4·3	+1·2	4·8	1·05	−0·97	0·49	8	3	−0·3	..	..	1	2	0	1	4	14	2	0	6	3	6	12	5	0	2	0	1	1	Trincomalee
5·2	+1·7	5·8	1·81	−1·96	0·57	28	4	−2·2	...	...	5	1	0	0	2	12	1	2	7	1	2	5	0	8	12	1	0	1	Hambantota
5·0	...	5·6	1·21	...	0·56	10	3	...	...	...	0	3	2	5	8	9	1	0	2	4	3	0	0	5	13	3	2	0	Mannar

TABLE *III*.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 4TH CLASS STATIONS— APRIL 1950

STATION	Maximum temperature, °F				Minimum temperature, °F				Mean dry bulb temperature 0830 hrs. I.S.T. °F	Mean wet bulb temperature 0830 hrs. I.S.T. °F	Vapour pressure millibars		Relative humidity %		Mean cloud amount, 0830 hrs. I.S.T.	Rainfall, inches				Number of rainy days (0,10″or more)		Wind	
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 0830 hrs. I S.T.	Departure from normal	Mean 0830 hrs. I.S.T.	Departure from normal		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Resultant direction 0830 hrs. I.S.T.	Velocity in
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Assam																							
Lumding ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·32	−3·29	0·16	30	2	−5·2	...	
Jammu and Kashmir																							
Jammu ...	88·7	−1·3	100	28,29	63·9	−5·0	57	8	71·8	58·8	11·0	−0·8	45	+5	2·3	0·70	−0·59	0·30	3	3	+0·4	N18W	
Kargil (R) ...																							
Mysore																							
Balehonnur ...	90·0	+2·7	95	17	65·9	−0·2	57	15	71·1	68·0	22·2	−0·2	85	−1	...	0·79	−2·76	0·46	29	2	−4·5	...	
Sikkim ...																							
Lachen ...	..	...	...	...	39·0	...	32	3	46·5	...	...	...	...	...	...	2·45	...	0·45	12	15	...	...	
Tibet																							
Yatung (Chumbi)	62·7	+5·6	68	23	31·0	−3·9	24	1	39·2	37·5	7·2	−0·7	87	+5	1·5	2·60	−1·31	0·92	14	4	−6·4	...	

(R) Register not received

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 5TH CLASS STATIONS— APRIL 1950

Division	Station	Rainfall, inches				Number of rainy days (0,10″ or more)		Division	Station	Rainfall, inches				Number of rainy d (0.10″ or
		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal			Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Assam ...	Mawsynram ...	21·55	...	4·10	30	12	...	Jammu & Kashmir	Sonamarg ...	4·60	−5·33	1·65	20	9
West Bengal ...	Bankura ...	0·29	−0·96	0·21	13	1	−1·7		Gurez * ...	...	...	...	...	...
Bihar ...	Muzaffarpur ...	0	−0·48	0	...	0	−0·9	Deccan (Desh) ...	Khandala ...	0	−0·31	0	...	0
	Chapra ...	0·04	−0·28	0·04	13	0	−0·7	Tamilnad ...	Palayamcottai ...	2·09	−0·39	1·73	10	2
	Arrah ...	0	−0·25	0	...	0	0−·5	Sikkim ...	Thangu ...	1·18	...	0·40	15	5
Punjab (I) ...	Dalhousie ...	1·46	−1·53	0·45	3	4	−1·7		Lachung ..	5·52	−0·51	1·41	14	8
	Kyelang ...	0	−3·33	0	...	0	−6·4		Chungthang ...	5·45	...	1·45	18	9
	Gondla ...	6·17	...	2·67	2	9	...							
	Koksar ...	5·55	...	1·54	1	11	...							
	Kothi ..	7·35	...	1·80	16	9	...							
	Dharampore ...	0·28	−1·10	0·15	3	1	−1·7							
	Kharsali ...	2·14	...	1·10	1	5	...							
	Rana ...	0·96	...	0·31	3	5	...							
	Jamuna Chetty ...	0·49	...	0·30	2	2	...							

(*) Data not reliable.

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Note :— Data upto 9·0 Km. a.s.l. are given under Table A and data above 9·0 Km. under Table B.

In tables A & B

n represents the number of observations.

V represents the mean wind speed in m/second irrespective of direction.

v represents the resultant mean velocity in m/second.

D represents the direction of the resultant mean wind in degrees East of North.

For the co-ordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Weather Report-January 1950. During this month Cooch Behar had only one ascent a day.

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

APRIL 1950

STATION	AHMEDABAD												ALLAHABAD											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	30	2·1	1·3	289	30	1·9	1·2	320	30	3·2	2·6	286	30	1·1	0·7	283	30	1·5	1·0	269	30	4·6	4·2	
0·15 a.g. ...	30	9·8	6·6	307	30	8·5	4·9	333	30	4·5	3·6	281	30	7·5	5·5	333	30	6·9	3·3	288	30	6·4	5·9	
0·6 a.s.l. ...	30	8·2	6·2	309	30	9·5	6·5	332	30	4·7	3·8	284	30	7·9	6·4	330	30	7·7	5·2	327	30	6·4	5·9	
1·0 ,, ...	30	6·1	4·8	295	30	7·1	4·5	318	30	5·1	3·9	281	30	7·6	6·5	308	30	7·5	5·7	308	30	6·5	6·3	
1·5 ,, ...	30	5·6	4·4	271	30	6·2	4·5	280	30	6·2	5·1	273	30	9·0	8·0	287	30	8·5	7·5	291	30	7·1	6·7	
2·0 ,, ...	30	7·6	6·6	260	30	7·7	6·7	261	30	7·9	6·7	265	29	11·0	10·3	279	30	10·3	9·4	285	30	8·7	8·3	
2·5 ,, ...	30	9·6	8·8	256	30	10·1	9·3	259	30	10·1	8·7	255	21	12·1	11·6	282	27	11·9	11·7	286	29	11·3	10·9	
3·0 ,, ...	30	10·2	9·1	252	29	12·4	11·4	255	30	12·5	11·5	251	18	13·9	13·4	282	25	14·0	13·5	285	29	13·3	13·1	
4·0 ,, ...	9	11·5	9·7	253	23	13·6	11·3	255	30	15·3	14·0	247	4	11·7	11·4	278	12	17·5	16·8	292	26	16·9	16·4	
5·0 ,, ...	4	12·6	12·3	248	18	14·9	13·2	247	29	16·2	14·6	254					5	14·6	14·5	299	21	17·8	17·3	
6·0 ,, ...	1	11·0	11·0	250	13	14·8	14·0	247	28	17·0	15·4	259					3	15·0	14·0	305	18	20·2	19·9	
7·5 ,, ...					9	19·3	18·2	255	26	20·7	19·3	258					1	15·5	15·5	295	9	24·6	24·1	
9·0 ,, ...					3	26·0	26·0	245	24	26·6	24·5	253									4	26·9	26·7	

STATION	AMBALA												ANANTAPUR								ASANSOL			
Time in I.S.T.	0230				0730				1430				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	30	3·4	2·3	339	30	2·3	1·2	340	30	3 9	1·9	281	30	2·3	2·0	243	30	3·2	2·1	75	30	2·1	0·7	
0·15 a.g. ...	30	10·8	8·5	344	30	8·8	5·4	348	30	7·1	4·5	294	30	5·1	4·4	243	30	4·8	3·3	77	30	5 9	2·9	
0·6 a.s.l. ...	30	11·2	8·7	340	30	9·7	6·5	340	30	7·5	4·8	295	30	5·4	4·1	249	30	4·7	3·0	86	30	7·9	5·5	
1·0 ,, ...	30	10·3	7·6	336	30	9·4	6·2	333	30	7·1	4·3	300	30	5·9	1·8	240	30	4·3	2·7	89	29	9·2	7·9	
1·5 ,, ...	30	7·6	4·6	318	30	8·1	4·8	317	30	6·8	4·0	295	30	6·1	2·2	170	30	4·6	2·6	86	28	9·6	8·7	
2·0 ,, ...	30	8·0	4·8	296	30	8·0	4·5	301	30	6·4	3·5	293	30	6·9	4·1	104	30	4·9	3·1	88	19	10·8	10·3	
2·5 ,, ...	30	8·7	6·1	276	30	7·9	4·8	289	29	5·5	2·7	279	30	7·9	6·3	86	30	5·3	3·8	84	7	9·9	9·3	
3·0 ,, ...	29	9·6	7·5	270	29	8·4	4·7	277	28	6·5	3·9	279	30	7·7	7·0	71	30	6·6	5·1	70	7	11·9	10·9	
4·0 ,, ...	3	6·7	6·1	288	24	8·8	7·2	275	25	9·4	7·0	275	30	9·1	8·7	55	27	8·0	6·4	61				
5·0 ,, ...					20	13·5	11·9	262	22	12·4	10·3	269	25	8·3	6·0	83	25	7·5	4·8	64				
6·0 ,, ...					14	17·0	16·3	262	18	15·6	14·0	266	22	6·7	2·6	104	22	7·0	3·3	37				
7·5 ,, ...					2	26·3	25·8	256	14	22·5	20·7	260	17	5·7	1·1	163	16	5·7	0·6	181				
9·0 ,, ...									6	29·5	28·0	250	8	5·7	4·0	135	11	6·2	1·7	171				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

APRIL 1950

STATION	ASANSOL												BANGALORE											
Time in I.S.T.	0730				1100				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·7	1·2	265	30	2·8	1·9	285	30	3·2	2·7	289	30	3·4	1·5	187	30	2·7	1·8	240	30	3·4	2·3	84
0·15 a.g. ...	30	4·3	2·4	278	30	5·0	3·7	291	30	4·9	4·6	297	26	6·4	3·2	185	30	4·9	3·3	224	29	4·4	2·9	77
0·6 a.s.l. ...	30	6·4	4·6	304	30	4·7	4·0	288	30	6·0	5·5	300	...	...	...	...	...	...	...	...	...	...	...	...
1·0 ,, ...	30	7·8	6·8	304	30	6·6	5·3	291	30	6·2	5·7	297	28	5·1	2·8	175	30	3·8	2·6	225	29	4·0	2·5	71
1·5 ,, ...	29	9·5	8·8	295	25	7·8	7·3	290	30	6·4	6·1	293	27	7·1	3·2	149	30	5·6	1·6	191	29	4·9	3·7	79
2·0 ,, ...	25	10·1	9·0	291	11	9·0	8·0	290	30	8·4	8·1	292	28	6·1	3·5	93	30	6·1	4·5	89	28	5·2	3·9	76
2·5 ,, ...	18	10·0	8·6	293	5	10·3	9·2	284	27	10·3	9·6	292	26	6·9	6·1	57	28	8·9	8·3	70	29	5·2	4·2	72
3·0 ,, ...	14	10·2	9·8	292	3	8·0	7·4	296	25	13·5	13·0	297	22	8·8	8·6	54	28	9·5	9·0	62	27	6·5	5·6	61
4·0 ,, ...	6	11·7	10·9	298					16	13·4	13·1	298					29	9·7	9·1	59	23	8·9	8·1	73
5·0 ,, ...	3	8·3	8·3	288					12	14·8	14·5	293					27	8·9	7·2	73	19	8·1	6·7	85
6·0 ,, ...	1	12·0	12·0	250					6	12·4	11·8	290					25	8·1	3·6	82	16	7·1	4·1	79
7·5 ,, ...									3	17·6	17·5	275					15	6·3	1·6	86	16	5·8	2·9	83
9·0 ,, ...									1	27·0	27·0	270					10	4·6	2·1	109	15	5·4	0·8	103

STATION	BAREILLY								BHOPAL												BHUJ			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·8	0·9	310	30	3·1	2·2	290	30	3·0	1·3	338	30	2·6	0·3	350	30	3·4	2·4	278	30	1·5	1·3	250
0·15 a.g. ...	30	8·2	5·7	314	30	6·2	5·2	289	30	9·0	4·0	344	30	6·9	2·2	345	30	5·2	4·0	280	30	8·6	6·7	290
0·6 a.s.l. ...	30	10·8	8·4	315	30	6·8	5·5	291	30	8·1	3·4	343	30	5·7	1·7	347	30	5·1	3·8	273	30	10·3	7·8	298
1·0 ,, ...	30	10·5	8·7	308	30	8·3	7·0	291	29	8·9	3·5	332	30	8·4	2·9	341	30	5·0	4·2	277	30	7·5	4·5	296
1·5 ,, ...	30	9·9	8·5	302	30	9·2	8·2	289	28	6·3	3·2	288	30	7·3	3·9	309	30	4·9	4·2	277	29	6·3	3·9	278
2·0 ,, ...	29	10·3	9·4	295	25	8·2	7·1	283	27	6·3	4·6	267	29	7·7	6·2	273	30	6·0	5·5	275	27	6·5	4·5	270
2·5 ,, ...	21	8·4	7·2	283	23	8·3	7·4	282	25	8·6	7·4	263	28	9·0	7·8	265	30	7·4	6·9	266	25	7·3	5·8	256
3·0 ,, ...	18	8·9	7·6	277	22	9·7	9·0	279	24	9·8	9·0	261	27	10·2	9·2	262	30	9·9	9·3	261	23	9·9	8·2	250
4·0 ,, ...	10	11·7	10·7	265	18	12·3	11·6	277	6	12·1	11·1	259	23	12·4	11·6	263	29	12·4	11·0	259	10	9·6	5·9	251
5·0 ,, ...	2	20·3	18·8	283	16	17·3	15·9	280	1	9·0	9·0	270	19	13·8	13·3	270	27	14·5	13·9	265				
6·0 ,, ...					11	21·4	20·6	278					15	15·6	14·9	264	27	16·2	15·5	267				
7·5 ,, ...					3	23·5	20·0	277					7	18·5	17·9	253	23	21·5	20·5	264				
9·0 ,, ...													1	31·0	31·0	250	11	27·8	26·7	261				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

APRIL 1950

STATION	BHUJ								BIKANER								BOMBAY							
Time in I.S.T.	0730				1430				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	30	0·9	0·7	240	30	2·5	1·5	278	30	2·2	1·0	170	30	2·4	1·7	258	30	1·2	0·4	322	30	0·9	0·3	
0·15 a. g. ...	30	6·5	4·9	290	29	5·4	3·5	282	30	7·8	2·7	212	30	4·6	3·2	260	30	4·7	2·4	318	30	4·1	0·8	
0·6 a.s.l. ...	30	11·3	8·3	311	29	5·0	3·9	283	30	7·6	0·4	71	30	4·9	3·8	255	30	5·8	4·3	335	29	5·2	3·0	
1·0 ,, ...	30	8·8	6·3	311	29	5·1	3·9	286	30	6·0	2·2	299	30	5·1	4·0	256	30	6·8	5·7	352	30	6·9	5·1	
1·5 ,, ...	29	7·1	5·0	289	28	4·9	3·8	285	30	6·4	4·0	287	28	4·7	3·9	264	24	7·6	6·3	341	29	7·2	4·9	
2·0 ,, ...	27	6·9	5·1	271	28	6·2	5·1	277	30	7·3	5·1	279	28	5·4	4·6	265	23	5·9	4·5	315	28	6·5	3·2	
2·5 ,, ...	26	7·5	5·8	263	28	7·9	6·8	261	29	8·3	5·8	277	26	6·3	5·4	271	20	5·5	5·0	197	25	5·5	0·7	
3·0 ,, ...	24	8·6	6·9	251	27	9·7	8·4	251	26	8·8	7·0	278	26	8·0	7·1	268	17	6·1	3·8	168	25	5·3	2·5	
4·0 ,, ...	22	11·6	10·4	245	26	13·4	11·8	248	18	10·3	9·3	281	25	12·2	11·5	266	9	5·7	3·4	176	21	5·7	3·1	
5·0 ,, ...	15	14·7	12·7	252	22	14·9	13·0	257	13	14·1	13·2	265	24	17·5	16·2	265	3	7·0	6·0	218	19	7·3	4·9	
6·0 ,, ...	11	16·4	14·4	263	13	15·5	14·2	259	9	18·8	17·9	256	18	19·3	18·0	261	2	7·0	5·7	248	15	10·8	7·7	
7·5 ,, ...	8	20·6	18·2	264	8	20·0	18·7	269					5	21·4	21·2	258					9	13·1	10·6	
9·0 ,, ...	4	25·1	23·1	255	1	30·0	30·0	240					1	32·5	32·5	255					1	14·5	14·5	

STATION	BOMBAY				CALCUTTA												COCHIN (Willingdon Isl			
Time in I.S.T.	1430				0230				0730				1100				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	.v	
Surface ...	30	5·9	4·9	281	30	3·5	3·1	207	30	3·3	2·6	206	30	3·8	2·0	213	30	3·8	2·3	220	30	2·2	1·2	
0·15 a. g. ...	30	5·4	4·3	282	30	7·5	6·4	214	30	5·6	3·9	224	30	5·1	2·9	207	30	4·5	2·5	222	28	3·9	3·3	
0·6 a.s.l. ...	30	3·8	3·0	332	30	8·9	7·4	230	30	7·0	4·2	254	30	5·3	3·2	230	30	4·4	2·9	244	28	3·9	3·4	
1·0 ,, ...	30	4·6	3·1	346	30	7·5	6·1	251	30	6·1	3·9	272	30	4·9	3·1	258	30	4·4	3·3	264	25	2·9	1·8	
1·5 ,, ...	30	5·1	2·8	324	29	8·1	6·0	274	28	6·3	4·7	285	29	5·8	4·4	287	29	5·2	4·5	286	19	3·0	1·4	
2·0 ,, ...	30	5·3	1·7	301	23	8·4	6·6	289	27	7·4	6·1	290	26	8·5	7·5	292	29	7·8	7·3	296	11	5·2	2·9	
2·5 ,, ...	29	5·1	1·7	230	20	8·6	7·7	297	22	8·9	7·6	294	15	8·9	7·8	300	29	10·3	9·8	299	6	7·7	6·5	
3·0 ,, ...	29	5·5	2·1	195	16	9·1	7·7	305	18	10·1	8·7	292	14	9·9	8·7	304	29	12·1	11·4	299	5	9·0	7·9	
4·0 ,, ...	27	5·5	2·2	210					5	8·8	5·0	215					28	14·5	14·1	299	3	7·3	6·0	
5·0 ,, ...	26	5·7	3·0	274					2	6·0	6·0	297					22	14·2	13·9	292				
6·0 ,, ...	23	9·2	5·4	269					1	9·5	9·5	310					19	15·7	15·1	279				
7·5 ,, ...	20	13·9	10·5	243													8	20·8	19·1	262				
9·0 ,, ...	15	17·0	13·2	257													6	26·8	25·3	251				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

APRIL 1950

STATION	COCHIN (Willingdon Island)								COOCH BEHAR				CUTTACK											
Time in I.S.T.	0730				1430				0730				0230				0730				1130			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·0	0·7	37	30	4·1	3·7	283	30	1·8	1·6	87	30	1·7	1·5	214	30	0·9	0·8	217	30	1·5	1·0	205
0·15 a.g. ...	30	3·1	2·7	19	30	4·6	4·4	289	22	5·8	5·3	89	30	6·3	6·0	214	30	4·2	3·6	213	30	4·5	2·9	206
0·6 a.s.l. ...	30	4·5	4·3	323	30	4·0	3·4	302	19	8·0	5·5	99	28	7·9	7·4	229	27	6·0	4·6	247	30	4·3	2·3	241
1·0 ,, ...	29	3·3	3·0	320	29	3·6	2·5	350	18	5·7	2·2	109	28	6·6	6·0	238	27	5·8	4·2	270	29	4·6	2·0	276
1·5 ,, ...	26	3·3	1·7	23	27	5·2	4·3	50	15	4·6	1·7	211	26	5·0	4·1	286	26	4·6	3·3	310	23	3·9	2·4	296
2·0 ,, ...	24	6·9	5·5	66	25	7·5	6·8	72	12	5·9	4·9	265	25	5·6	4·8	311	20	4·4	3·4	318	14	4·1	3·4	320
2·5 ,, ...	22	9·7	9·1	76	24	9·5	9·3	74	9	8·3	7·7	279	21	7·1	6·4	318	17	5·1	4·0	328	8	4·4	2·7	324
3·0 ,, ...	19	12·6	12·0	74	21	11·7	11·3	71	8	11·2	10·5	275	17	8·1	7·2	319	17	6·3	4·7	325	4	5·9	4·9	360
4·0 ,, ...	9	9·6	9·5	74	19	10·5	9·9	74	4	10·6	7·0	286	10	10·7	9·7	292	12	6·5	5·0	328				
5·0 ,, ...	7	9·6	8·9	81	17	9·3	8·4	82	2	13·5	13·5	292					7	7·1	5·4	292				
6·0 ,, ...	4	9·7	7·5	64	14	8·3	6·3	91	2	11·0	11·0	280					7	8·5	7·0	276				
7·5 ,, ...	1	8·0	8·0	100	11	8·1	6·2	101	1	12·5	12·5	290					1	15·0	15·0	215				
9·0 ,, ...					9	6·3	3·9	123									1	13·0	13·0	240				

STATION	CUTTACK				DEOLALI				DIBRUGARH								GADAG							
Time in I.S.T.	1430				0730				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	2·1	1·6	195	23	0·6	0·4	226	30	2·6	2·3	64	30	2·7	2·3	48	30	4·3	3·6	250	30	4·1	3·7	235
0·15 a.g ...	30	4·8	3·7	188	23	3·3	1·4	233	25	4·2	3·9	58	28	3·6	2·9	48	30	7·5	4·2	269	30	6·7	4·7	240
0·6 a.s.l. ...	30	4·2	3·3	195	23	1·6	0·9	215	24	5·1	4·8	49	27	4·2	3·5	58	...	..	...	...	...	...	...	..
1·0 ,, ...	30	3·1	1·7	232	23	5·8	3·3	356	23	4·7	4·2	59	26	3·9	1·9	73	30	7·9	2·3	279	30	6·1	2·3	328
1·5 ,, ...	30	3·4	2·5	285	23	6·8	3·7	347	23	2·8	0·8	163	25	4·1	2·1	221	30	6·6	1·5	85	30	6·7	2·5	45
2·0 ,, ...	30	4·7	4·2	307	23	6·6	3·3	326	23	4·1	3·4	331	24	6·7	6·1	236	30	5·4	3·4	113	30	5·9	2·2	82
2·5 ,, ...	30	6·4	5·9	314	23	5·0	0·9	286	20	7·2	6·8	241	21	8·9	8·4	228	30	5·4	3·9	99	30	5·9	3·8	83
3·0 ,, ...	30	8·2	7·4	317	23	5·2	2·0	182	17	7·6	7·1	244	20	9·1	8·6	230	30	5·5	4·3	85	30	6 2	5·1	84
4·0 ,, ...	27	8·4	7·7	314	23	6·8	4·7	205	5	4·7	4·6	260	11	6·9	6·8	239	26	7·0	6·1	67	29	7·3	6·6	68
5·0 ,, ...	25	10·0	9·0	296	23	7·2	5·7	270	2	6·3	6·3	2	5	9·4	7·6	253	20	6·5	2·5	81	28	6·2	3·1	84
6·0 ,, ...	22	11·1	9·8	277	22	10·2	7·5	272	1	5·5	5·5	340	2	7·5	7·3	258	6	7·0	2·3	212	25	7·0	0·9	166
7·5 ,, ...	10	14·0	13·2	263	20	13·9	11·2	254					2	14·3	13·2	299					20	7·3	1·6	212
9·0 ,, ..	9	18·8	18·3	257	16	16·5	15·3	247					2	25·7	25·4	294					18	7·1	3·0	239

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

APRIL 1950

STATION	GADAG				GAYA												GOPALPUR		
Time in I.S.T.	1430				0230				0730				1130				1430				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	2·6	0·4	88	30	2·5	1·2	217	30	2·8	2·0	206	30	4·5	3·1	286	30	6·5	5·8	286	30	4·6	4·1
0·15 a.g. ...	30	4·0	1·2	86	30	7·3	4·7	291	30	6·1	4·1	243	30	6·1	4·6	288	30	8·3	7·4	298	30	7·5	7·0
0·6 a.s.l. ...	...	...	...	...	30	9·6	7·4	309	30	7·8	5·8	306	30	6·0	4·8	286	30	9·1	8·3	295	30	5·5	5·0
1·0 ,, ...	30	3·7	1·1	86	30	9·5	8·7	301	30	8·4	7·3	307	29	6·8	5·8	293	30	8·9	8·2	295	30	4·8	3·8
1·5 ,, ...	30	3·8	1·2	82	30	11·0	10·3	293	30	10·0	9·0	295	29	10·1	8·6	290	30	9·2	8·7	293	29	4·1	2·4
2·0 ,, ...	30	4·2	1·9	83	27	12·0	11·1	287	26	11·7	10·6	292	25	11·3	10·7	287	30	9·7	9·3	290	28	4·1	2·9
2·5 ,, ...	30	4·3	2·5	79	10	10·7	8·3	279	24	13·5	12·4	293	17	11·8	11·1	287	30	12·1	11·6	291	20	5·9	4·2
3·0 ,, ...	29	5·4	4·1	81	6	9·5	6·5	281	12	12·7	11·0	294	8	11·7	10·7	290	28	14·3	14·1	289	16	7·6	5·3
4·0 ,, ...	25	6·6	5·1	71	1	14·0	14·0	225	5	14·7	13·7	302					23	18·4	18·0	286	11	6·2	4·9
5·0 ,, ...	23	7·2	3·6	77													20	17·9	17·5	225	10	4·3	2·3
6·0 ,, ...	20	7·0	1·5	69													12	18·6	17·9	282	6	6·7	3·3
7·5 ,, ...	10	7·1	2·2	11													5	24·5	24·1	292			
9·0 ,, ...	4	10·3	5·8	327																			

STATION	GOPALPUR				GORAKHPUR								HYDERABAD (Dn)										
Time in I.S.T.	1430				0730				1430				0230				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	7·3	7·0	190	30	2·6	1·3	286	30	5·3	5·0	272	30	1·7	0·5	252	30	1·3	0·7	270	30	3·0	1·7
0·15 a.g. ...	30	10·3	10·0	190	30	8·4	4·7	300	30	8·3	7·7	283	30	6·7	4·0	179	30	6·9	2·9	206	30	4·1	2·1
0·6 a.s.l. ...	30	4·8	3·5	192	30	9·2	7·3	300	30	9·3	8·8	283	30	4·8	2·1	177	30	3·7	1·1	207	30	3·8	2·0
1·0 ,, ...	30	3·2	1·0	238	30	10·5	9·7	301	29	10·3	9·7	282	30	8·6	4·8	167	30	8·9	3·5	198	30	3·8	1·8
1·5 ,, ...	29	3·6	2·2	319	24	10·5	10·3	297	24	10·1	9·9	281	30	6·5	2·9	156	30	7·4	3·0	191	30	3·8	1·8
2·0 ,, ...	28	4·9	3·9	330	18	10·0	9·8	292	23	11·6	11·4	283	30	5·4	0·8	70	30	6·2	2·1	130	30	3·8	1·3
2·5 ,, ...	27	5·8	4·9	324	14	10·1	9·9	293	18	12·0	11·6	293	30	5·8	1·8	43	30	5·4	2·3	91	30	4·2	1·5
3·0 ,, ...	24	6·3	5·6	336	11	11·2	11·0	290	15	14·1	13·7	294	30	6·1	3·2	18	30	5·6	3·2	59	30	4·5	2·1
4·0 ,, ...	23	6·9	6·1	332	4	12·0	11·5	287	10	15·1	14·7	298	14	6·5	4·7	1	29	6·0	4·8	38	26	5·6	3·1
5·0 ,, ...	19	8·4	6·4	310	1	12·0	12·0	285	7	14·3	13·8	284	2	6·7	5·5	319	27	6·7	3·4	28	25	5·7	3·0
6·0 ,, ...	15	9·2	6·3	284					5	18·2	17·7	283	2	4·7	4·6	169	26	7·7	2·7	333	25	6·8	2·7
7·5 ,, ...	8	13·6	10·6	248					3	24·6	22·0	285					17	7·4	5·3	241	25	8·5	4·8
9·0 ,, ...	4	18·6	18·1	257													7	7·3	5·4	239	22	9·8	6·3

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

APRIL 1950

STATION	JAGDALPUR												JAMSHEDPUR											
Time in I.S.T.	0230				0730				1430				0730				1100				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	0·8	0·7	186	30	0·5	0·3	198	30	2·1	0·6	274	30	1·5	1·2	282	30	2·0	1·3	315	30	2·7	1·9	294
0·15 a. g.	29	6·4	5·3	208	30	5·0	4·2	215	30	3·7	1·4	300	30	3·0	2·5	276	30	2·8	1·9	289	30	3·9	3·1	294
0·6 a.s.l.	29	4·7	4·0	209	30	2·9	2·5	215	30	3·1	1·1	288	30	4·1	2·6	286	30	3·4	2·5	288	30	3·9	3·2	295
1·0 ,,	29	6·6	4·6	226	30	6·2	4·8	239	30	3·4	1·3	303	30	5·1	3·5	305	30	4·1	3·1	290	30	4·8	4·2	299
1·5 ,,	29	4·7	1·9	291	30	5·4	3·0	261	30	3·3	1·6	305	30	6·5	5·3	303	30	6·6	5·9	290	30	5·5	5·1	299
2·0 ,,	29	4·6	2·5	337	30	4·5	2·3	334	30	3·3	1·9	321	30	8·3	7·6	294	27	8·4	7·9	290	30	6·7	6·3	295
2·5 ,,	28	4·9	3·4	336	30	5·0	3·6	351	30	3·7	2·2	332	28	9·5	8·9	290	13	10·5	10·1	297	30	8·2	7·6	293
3·0 ,,	27	5·7	4·4	337	29	5·8	4·6	357	30	4·4	2·7	339	24	11·4	10·7	296	10	10·5	10·2	305	29	9·9	9·1	294
4·0 ,,	22	6·9	6·1	328	27	6·5	5·3	345	24	5·3	4·2	344	8	12·1	11·5	300					27	12·4	11·9	295
5·0 ,,	8	5·4	3·9	296	22	4·8	3·1	320	20	5·6	4·0	318	1	11·5	11·5	300					22	11·8	11·2	289
6·0 ,,	4	5·9	5·1	274	18	4·9	2·9	267	18	6·6	4·7	275									16	16·0	14·8	278
7·5 ,,	1	7·0	7·0	250	14	8·7	6·9	260	17	8·9	7·9	262									6	19·4	18·9	266
9·0 ,,					12	9·7	8·4	258	16	11·0	9·9	267												

STATION	JHARSUGUDA												JODHPUR											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	1·0	0·6	51	30	0·7	0·5	17	30	1·3	0·9	287	30	3·9	1·4	331	30	2·9	0·5	22	30	3·6	2·5	269
0·15 a. g.	30	5·2	2·4	44	30	4·2	1·6	68	30	3·6	2·6	268	30	8·7	2·9	327	30	6·1	1·5	36	30	5·2	4·0	267
0·6 a.s.l.	30	6·8	2·5	3	30	4·7	0·9	67	30	3·5	2·7	278	30	8·3	3·2	308	30	7·9	1·6	340	30	6·2	4·7	264
1·0 ,,	30	6·9	3·9	329	30	5·0	1·7	352	30	3·9	2·9	283	30	7·4	4·0	285	30	6·3	3·7	289	28	5·3	3·6	268
1·5 ,,	30	6·2	4·4	310	30	5·9	3·7	318	30	4·3	3·7	287	28	6·4	5·1	265	30	6·6	5·0	282	28	5·1	3·9	267
2·0 ,,	29	6·0	5·4	292	29	5·7	4·8	301	30	5·1	4·5	291	28	7·2	6·4	259	28	6·6	5·5	286	27	5·2	3·9	262
2·5 ,,	26	6·5	5·7	289	28	7·3	6·3	301	30	6·3	5·7	294	27	7·7	6·8	251	27	7·7	6·7	271	25	6·2	5·1	262
3·0 ,,	24	7·3	6·5	292	27	8·9	7·7	300	30	7·6	6·9	299	26	8·4	7·6	256	26	9·1	7·9	266	25	8·4	7·4	261
4·0 ,,	14	8·3	7·5	292	21	10·7	9·8	302	27	9·7	8·5	304	11	12·3	11·8	264	24	12·7	11·2	257	22	12·5	11·8	258
5·0 ,,					10	9·7	8·6	293	23	10·3	9·5	292	2	18·3	18·0	262	18	19·1	17·1	259	21	16·9	15·3	258
6·0 ,,					7	10·3	9·1	252	18	13·4	12·1	274					10	26·1	24·0	269	19	21·8	20·2	263
7·5 ,,					3	15·2	14·6	247	13	16·7	15·2	265					1	27·0	27·0	235	13	26·7	23·9	266
9·0 ,,					2	19·5	18·7	245	8	21·6	21·0	266									9	36·4	30·3	267

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

APRIL 1950

STATION	JABALPUR												MADHOSAGAR											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	30	0·9	0·4	180	30	0·9	0·4	220	30	2·1	1·7	275	30	1·4	0·6	270	30	1·6	0·8	260	30	3·4	3·1	
0·15 a.g. ...	30	5·1	1·3	54	30	4·7	0·7	222	30	4·8	3·8	278	30	6·8	3·6	357	30	4·6	1·3	317	30	4·9	4·5	
0·6 a.s.l ...	30	5·6	1·4	35	30	5·4	0·4	255	30	5·1	3·9	280	30	8·5	5·1	355	30	7·9	3·7	345	30	5·1	4·6	
1·0 ,, ...	30	6·0	2·4	340	30	6·1	1·5	319	30	5·1	3·9	286	30	8·0	5·4	336	30	7·7	4·0	316	30	5·1	4·7	
1·5 ,, ...	30	5·7	3·5	295	20	5·5	3·6	292	29	5·2	4·1	285	30	6·8	5·4	294	30	6·9	4·9	290	30	5·5	4·9	
2·0 ,, ...	29	6·7	5·5	279	29	7·1	6·2	283	29	5·8	5·1	285	29	8·2	7·4	272	28	8·4	7·2	273	29	6·7	6·0	
2·5 ,, ...	27	7·5	6·8	276	29	8·7	8·1	280	29	7·1	6·3	280	27	11·2	10·1	263	26	9·9	8·9	267	29	8·2	7·6	
3·0 ,, ...	27	9·0	8·1	275	29	9·7	8·8	274	29	8·8	8·1	275	25	13·3	12·6	267	26	12·4	11·5	267	28	10·2	9·8	
4·0 ,, ...	3	11·3	10·1	272	25	10·8	10·0	276	25	12·5	11·7	271	8	16·7	16·3	266	24	14·7	13·7	267	25	16·3	15·4	
5·0 ,, ...					15	10·6	9·7	276	25	13·5	13·1	271					19	16·6	16·1	269	23	18·2	17·6	
6·0 ,, ...					8	12·9	12·6	285	23	15·4	14·7	272					19	18·9	18·2	264	20	21·3	20·9	
7·5 ,, ...					2	16·7	16·7	275	15	20·6	20·0	273					8	21·4	20·2	269	7	23·5	23·4	
9·0 ,, ...					1	23·0	23·0	290	12	28·0	26·2	268					1	23·0	23·0	285	4	23·0	22·9	

STATION	MADRAS												MALEGAON											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	30	2·6	2·2	197	30	2·5	1·9	206	30	5·0	4·3	134	30	3·6	2·3	270	30	2·5	1·4	299	30	2·5	1·1	
0·15 a.g. ...	30	6·0	5·3	180	30	5·2	4·5	204	30	5·9	5·0	146	30	7·6	5·6	299	30	5·6	3·4	319	30	3·4	1·1	
0·6 a s l. ...	30	6·8	5·7	182	30	6·7	5·5	199	30	4·2	2·4	178	30	7·6	5·6	299	30	5·6	3·4	319	30	3·4	1·1	
1·0 ,, ...	30	5·5	3·7	171	30	6·0	3·6	191	30	4·5	1·8	143	30	9·7	6·3	314	30	7·1	4·0	344	30	3·9	1·7	
1·5 ,, ...	30	5·2	3·5	117	30	5·6	3·4	102	30	5·5	3·4	91	29	10·2	7·1	334	30	6·7	4·0	351	30	3·7	1·7	
2·0 ,, ...	29	7·1	5·4	82	30	7·7	5·8	75	30	7·3	5·	73	28	8·9	6·0	314	30	6·3	3·3	322	30	3·7	2·1	
2·5 ,, ...	28	8·8	7·3	65	30	9·8	8·1	62	30	9·3	7·8	60	28	7·1	4·1	309	30	5·8	2·5	279	30	4·0	2·4	
3·0 ,, ...	24	9·9	8·3	53	30	10·7	9·1	53	30	10·5	9·2	55	28	6·8	1·9	295	30	5·5	2·7	245	29	4·6	2·6	
4·0 ,, ...	16	7·9	6·5	45	27	9·6	7·8	56	29	9·4	8·6	55	24	7·5	3·7	236	23	7·3	5·9	221	27	6·6	5·3	
5·0 ,, ...					25	8·6	5·7	62	24	8·4	5·9	67					22	8·8	7·2	242	26	8·2	7·5	
6·0 ,, ...					21	9·3	4·1	82	24	10·4	4·1	66					20	9·7	7·9	262	25	11·8	9·4	
7·5 ,, ...					14	8·5	3·2	70	20	10·7	4·0	65					14	14·3	11·7	255	21	16·2	13·1	
9·0 ,, ...					7	4·1	0·2	289	16	7·3	1·2	37					10	19·6	15·0	245	17	19·0	14·8	

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

APRIL 1950

STATION	MANGALORE												MASULIPATAM											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·8	0·9	17	30	1·8	1·0	79	30	4·6	4·4	269	30	1·5	1·3	135	30	1·7	1·5	186	30	3·9	3·6	161
0·15 a.g. ...	30	3·1	2·3	333	30	2·6	1·9	50	30	6·0	5·8	276	30	5·6	5·4	189	30	4·5	4·1	195	30	5·8	5·5	161
0·6 a.s.l. ...	30	3·1	2·5	309	30	2·8	2·0	317	30	4·3	3·4	285	30	6·5	5·7	188	30	6·9	6·6	197	30	4·3	3·3	300
1·0 ,, ...	28	2·8	1·3	305	28	3·4	1·7	308	30	2·9	1·2	331	30	5·2	3·5	176	30	6·7	5·6	189	30	4·5	1·7	208
1·5 ,, ...	22	4·0	1·1	334	24	4·2	1·3	354	29	4·0	2·1	54	30	4·5	1·6	139	28	5·3	2·3	124	30	5·7	1·5	112
2·0 ,, ...	19	5·8	2·3	85	23	5·7	2·6	53	29	5·7	4·3	72	28	6·1	2·9	73	24	6·2	3·9	76	30	6·6	3·5	75
2·5 ,, ...	16	7·6	6·1	77	22	6·9	5·7	80	28	8·7	7·3	78	27	7·4	5·2	46	20	8·1	6·2	59	29	8·4	6·6	55
3·0 ,, ...	14	9·4	8·1	69	22	9·0	8·3	71	26	10·7	9·9	78	26	8·2	6·2	41	18	9·4	8·1	50	28	9·4	7·6	55
4·0 ,, ...	4	6·3	6·3	80	17	9·8	9·2	68	25	10·7	10·1	83	15	9·4	6·4	24	16	9·4	7·5	38	25	9·4	7·9	41
5·0 ,, ...					15	8·2	6·9	78	23	8·3	6·8	84					13	7·8	6·1	51	19	6·8	4·7	42
6·0 ,, ...					10	8·5	5·6	81	21	8·6	4·8	75					9	6·6	2·1	86	17	7·3	2·8	38
7·5 ,, ...					6	7·6	2·5	147	16	8·2	3·4	58					4	5·4	2·2	127	7	6·3	3·5	115
9·0 ,, ...					4	7·0	2·1	169	13	10·0	2·8	25					3	5·3	1·9	307	6	6·7	1·9	130

STATION	NAGERCOIL												NAGPUR											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	3·0	2·5	290	30	2·1	1·6	305	30	5·2	4·1	252	30	2·0	0·9	329	30	1·7	0·9	6	30	1·9	0·4	331
0·15 a.g. ...	28	7·0	6·0	301	30	5·0	4·3	308	30	7·2	5·7	252	30	6·8	3·3	19	30	5·4	3·3	9	30	2·6	0·5	354
0·6 a.s.l. ...	28	8·1	6·8	307	30	7·1	5·7	312	30	6·4	4·2	282	30	7·5	3·6	23	30	7·2	3·1	25	30	2·8	0·7	328
1·0 ,, ...	28	5·6	3·5	325	30	5·8	4·1	323	30	5·0	2·4	335	30	7·5	3·9	10	30	7·2	2·3	15	30	3·3	1·5	309
1·5 ,, ...	28	4·6	2·7	60	30	4·7	3·0	38	30	5·7	4·4	22	30	5·8	2·6	356	29	5·7	1·5	347	30	3·4	1·9	302
2·0 ,, ...	28	6·8	6·1	60	29	6·4	5·9	62	30	6·9	5·8	37	29	4·5	1·8	315	29	4·8	1·7	299	30	4·1	2·9	286
2·5 ,, ...	27	9·3	8·7	64	29	9·2	8·7	66	27	9·5	8·7	55	29	4·5	2·2	269	28	4·5	2·2	281	28	4·3	3·6	285
3·0 ,, ...	27	10·5	9·9	63	29	10·2	9·4	63	27	10·8	10·4	60	26	5·7	2·9	290	26	4·4	2·6	264	25	5·4	4·7	284
4·0 ,, ...	13	7·3	6·6	73	29	8·3	7·6	75	26	10·0	8·8	68	18	6·6	5·7	271	24	5·7	4·7	274	24	6·9	6·5	287
5·0 ,, ...	3	8·8	7·5	85	26	9·0	7·0	84	24	9·2	7·6	83	10	7·0	6·5	264	23	7·8	7·1	282	22	8·3	7·6	286
6·0 ,, ...	3	9·0	4·5	97	23	10·5	7·6	82	23	11·1	8·1	78	4	8·1	7·9	267	19	9·7	7·8	271	19	10·7	9·7	282
7·5 ,, ...					15	7·0	3·8	94	20	10·6	6·5	59	1	12·5	12·5	290	10	10·9	9·7	262	11	16·8	14·7	268
9·0 ,, ...					10	5·2	1·8	122	15	9·7	6·0	88					3	14·3	13·5	253	9	21·9	19·8	265

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

APRIL 1950

STATION	NEW DELHI												POONA										
Time in I.S.T.	0230				0730				1430				0230				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	3·3	2·3	342	30	2·2	1·4	310	30	5·6	4·1	288	30	1·3	0·9	260	30	1·0	0·8	254	30	3·0	1·6
0·15 a. g. ...	30	10·2	7·1	355	30	7·3	3·9	332	30	7·5	5·6	288	30	3·9	3·3	292	30	2·7	1·9	289	30	3·7	2·5
0·6 a.s.l. ...	30	9·7	6·4	346	30	8·6	5·5	330	30	7·7	5·8	293	30	2·7	2·3	247	30	1·8	1·3	246	30	3·0	1·8
1·0 ,, ...	30	8·9	5·9	325	30	8·1	5·4	307	30	7·7	5·6	287	30	6·2	4·8	318	30	5·1	3·2	354	30	3·5	2·2
1·5 ,, ...	30	8·9	7·0	293	30	8·5	6·5	292	30	7·0	5·4	287	30	7·1	5·1	341	30	7·3	4·8	5	30	3·8	2·4
2·0 ,, ...	30	9·2	8·4	285	29	9·2	7·8	283	29	6·9	5·7	277	30	5·1	2·6	5	30	6·0	2·6	8	30	3·3	1·7
2·5 ,, ...	27	9·1	8·3	279	29	9·5	8·2	279	29	7·9	6·3	275	30	4·8	2·5	100	30	5·0	1·7	97	30	3·5	0·8
3·0 ,, ...	23	10·9	9·9	274	27	10·6	9·5	272	29	8·9	7·4	275	30	5·5	3·6	130	30	5·1	2·1	128	30	3·8	1·3
4·0 ,, ...	6	13·7	11·0	269	15	12·1	10·8	265	28	12·5	11·4	273	23	5·6	3·2	137	29	5·3	2·1	153	29	3·8	0·3
5·0 ,, ...	3	16·8	16·8	263	9	13·5	13·7	275	26	16·6	16·3	270	4	4·3	3·7	218	25	5·5	3·1	281	26	5·4	1·3
6·0 ,, ...					6	16·2	15·8	269	20	18·8	18·1	269	1	3·0	3·0	260	23	7·7	4·7	283	25	7·8	4·0
7·5 ,, ...									14	22·4	21·8	271	1	9·5	9·5	275	16	11·2	7·8	267	24	10·4	7·6
9·0 ,, ...									8	24·9	24·3	267					8	14·6	11·7	278	20	15·9	11·4

STATION	PORT BLAIR												RAIPUR										
Time in I.S.T.	0230				0730				1430				0230				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	2·2	1·0	261	30	1·8	0·4	309	30	2·3	0·9	126	30	2·2	0·5	294	30	1·3	0·3	287	30	1·5	1·1
0·15 a. g. ...	29	4·1	1·0	320	30	3·9	0·9	337	28	3·7	1·6	115	30	6·3	1·7	351	30	5·5	1·1	304	30	3·8	2·7
0·6 a.s.l. ...	28	4·6	0·4	309	28	5·3	0·4	314	27	3·6	0·6	90	30	6·4	2·1	354	30	6·8	1·5	321	30	4·0	2·8
1·0 ,, ...	27	3·8	1·4	112	27	4·6	0·6	145	28	3·7	0·9	57	30	5·8	2·4	340	30	5·9	2·2	1	30	4·1	3·2
1·5 ,, ...	24	4·9	1·6	96	26	5·4	2·0	111	26	4·8	2·5	65	29	4·5	2·6	313	29	4·7	1·9	319	30	4·1	3·2
2·0 ,, ...	20	5·5	3·7	64	24	6·2	3·6	77	24	6·3	4·3	80	30	4·2	2·8	291	29	4·4	2·7	305	30	3·9	3·1
2·5 ,, ...	15	6·3	5·0	63	22	7·0	5·0	70	22	7·7	5·6	78	26	5·6	4·2	285	30	5·2	3·9	301	30	5·5	4·5
3·0 ,, ...	10	6·0	5·3	53	20	6·4	4·9	74	21	8·2	6·4	80	20	6·8	5·3	297	30	6·5	5·1	299	30	6·4	5·4
4·0 ,, ...	5	5·5	1·6	61	15	6·1	2·4	61	17	6·9	5·3	83	4	8·1	7·6	317	28	7·5	6·8	295	29	8·5	7·7
5·0 ,, ...					7	6·7	4·8	64	12	7·3	6·1	74	1	10·5	10·5	315	21	8·9	8·4	294	28	9·0	8·1
6·0 ,, ...					3	5·7	3·4	70	9	6·3	7·0	72					17	10·4	8·6	281	26	11·1	9·9
7·5 ,, ...					1	3·0	3·0	315	7	10·0	8·7	72					11	14·1	13·2	258	21	13·4	12·3
9·0 ,, ...									6	5·4	4·9	55					9	19·6	18·8	256	16	18·4	17·4

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

APIRL 1950

STATION	SAHARSA												TEZPUR											
Time in I.S.T.	0730				1100				1430				0230				0730				1100			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·9	0·4	46	30	2·9	1·0	275	30	3·8	3·1	280	30	2·3	1·9	66	30	2·6	2·4	73	30	2·7	2·1	79
0·15 a.g. ...	30	8·1	0·7	264	30	6·4	2·9	291	30	7·6	6·2	294	23	7·6	7·2	72	28	7·3	6·8	76	29	6·5	5·6	82
0·6 a.s l. ...	30	10·4	6·2	296	30	7·6	3·8	286	30	9·0	7·4	283	23	6·0	4·0	113	27	7·7	6·3	96	29	6·1	4·3	93
1·0 ,, ...	30	10·7	9·0	291	27	8·1	5·7	277	30	10·5	9·2	281	23	5·0	2·6	205	25	4·9	2·6	114	28	4·7	1·4	178
1·5 ,, ...	27	11·1	10·6	283	23	10·1	9·8	285	29	11·4	11·0	280	22	6·8	6·2	243	23	5·3	3·4	242	25	5·9	4·2	239
2·0 ,, ...	18	10·0	9·3	285	15	10·1	9·8	288	27	14·5	14·3	284	18	8·6	8·3	250	21	7·0	6·2	246	20	7·1	6·2	250
2·5 ,, ...	16	10·9	9·7	295	9	9·5	9·2	289	25	15·8	15·6	285	12	11·2	10·9	256	19	7·7	6·7	251	12	8·3	8·0	246
3·0 ,, ...	15	13·0	12·3	292	5	8·3	7·6	285	21	15·6	15·0	290	11	12·2	11·9	265	17	8·2	7·7	257	7	10·1	9·8	256
4·0 ,, ...	6	13·2	12·9	292					15	17·7	17·5	290	4	12·6	11·7	267	10	12·2	11·5	266				
5·0 ,, ...	3	13·2	13·2	294					8	16·3	15·6	286					5	7·8	7·6	271				
6·0 ,, ...	1	12·0	12·0	295					7	17·9	17·2	282					4	18·6	18·3	283				
7·5 ,, ...									4	21·5	21·1	283					1	20·0	20·0	240				
9·0 ,, ...																								

STATION	TEZPUR				TIRUCHIRAPALLI												TRIVANDRUM				UDAIPUR			
Time in I.S.T.	1430				0230				0730				1430				0730				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	2·7	1·0	88	30	1·5	0·5	193	30	1·3	0·5	302	30	1·5	0·9	100	30	1·4	1·3	1	30	1·5	1·1	261
0·15 a.g. ...	29	6·4	2·3	97	50	4·7	2·0	195	30	3·6	1·6	272	30	3·1	1·4	106	29	4·8	4·4	350	30	4·4	2·8	312
0·6 a.s.l. ...	29	5·3	0·6	137	30	6·3	3·1	187	30	4·5	2·1	257	30	3·1	1·7	103	99	5·7	5·1	328	...	...	...	...
1·0 ,, ...	28	4·6	2·4	253	27	5·6	1·8	159	30	4·5	1·2	230	30	3·7	2·1	98	28	5·2	4·3	331	30	5·9	3·9	313
1·5 ,, ...	27	7·7	6·8	250	27	5·0	1·9	99	30	4·7	1·9	102	30	4·8	3·7	85	25	5·0	3·4	20	30	6·3	4·8	285
2·0 ,, ...	24	10·1	9·8	245	27	6·6	5·1	73	29	7·4	6·5	75	30	7·6	6·8	70	22	7·4	6·3	53	30	7·5	6·3	253
2·5 ,, ...	22	12·7	12·4	244	25	9·3	8·5	64	29	9·9	9·0	69	29	10·4	9·7	62	18	10·5	9·7	72	29	9·1	8·2	252
3·0 ,, ...	15	13·5	12·7	247	23	11·6	10·8	60	29	11·6	11·0	62	29	11·4	10·8	56	16	11·7	11·1	69	24	10·9	9·9	256
4·0 ,, ...	9	15·4	15·1	262	5	10·3	9·3	52	25	10·6	9·8	68	25	10·6	9·6	60	8	7·2	6·9	77	4	13·1	12·7	242
5·0 ,, ...	3	19·3	19·3	265					21	9·9	8·6	79	20	9·0	7·0	73	3	9·0	8·4	71				
6·0 ,, ...	2	14·3	14·1	265					15	9·2	5·2	75	17	10·0	6·6	77	2	8·7	8·7	85				
7·5 ,, ...	2	13·5	12·7	285					8	9·0	5·8	49	15	10·9	5·8	79	2	9·7	9·7	92				
9·0 ,, ...	2	18·5	18·1	284					2	4·7	1·5	268	9	10·0	2·8	111								

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

APRIL 1950

STATION	UDAIPUR								VENGURLA												VERAVAL		
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	0·8	0·6	295	30	3·4	2·3	255	30	0·5	0·4	2	30	0·4	0·2	121	30	4·1	3·7	253	30	4·5	3·7
0·15 a. g. ...	29	3·6	2·1	327	28	6·3	4·3	264	30	3·2	2·3	343	30	2·6	1·2	71	30	5·3	4·7	261	30	8·8	7·8
0·6 a.s.l. ...									30	4·4	3·2	342	30	3·7	1·1	313	30	3·7	2·4	265	29	9·0	7·5
1·0 ,, ...	30	5·6	2·6	335	28	6·0	4·3	270	30	7·2	6·3	347	27	5·7	3·3	357	29	3·6	1·6	350	28	7·2	5·0
1·5 ,, ...	30	6·1	3·0	295	29	5·5	4·1	270	28	7·3	5·7	346	24	6·7	4·3	5	28	4·1	2·3	27	28	6·2	3·5
2·0 ,, ...	30	6·6	5·5	264	29	5·5	4·3	269	27	5·1	2·3	30	21	5·7	1·6	28	27	4·9	3·1	56	27	5·8	3·9
2·5 ,, ...	29	8·8	8·3	254	29	7·2	6·5	267	23	5·7	4·3	111	19	4·6	2·4	99	26	6·0	4·4	74	27	7·4	6·0
3·0 ,, ...	26	10·7	10·0	257	29	9·4	8·8	259	20	6·4	5·5	110	17	4·7	3·6	99	23	6·4	5·3	81	27	8·9	7·6
4·0 ,, ...	21	14·0	12·3	263	26	12·2	11·7	251	7	5·5	3·4	79	16	6·8	5·6	82	20	6·5	4·8	80	15	9·8	8·2
5·0 ,, ...	10	14·1	13·2	249	24	16·7	15·8	257	4	7·9	2·6	41	15	5·5	1·7	44	19	4·8	1·7	109			
6·0 ,, ...	5	14·3	13·6	266	22	20·5	18·7	259	2	8·5	3·6	343	15	7·2	0·7	224	18	5·6	1·5	144			
7·5 ,, ...					13	21·1	19·2	273	2	7·7	1·3	307	12	8·1	2·4	223	8	7·7	4·4	216			
9·0 ,, ...					7	21·7	19·4	271					6	11·4	7·7	219	3	14·2	12·0	158			

STATION	VERAVAL								VISAKHAPATNAM												MINICOY		
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km.	n	V	v	D		V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	3·0	2·5	338	30	6·7	6·1	276	30	1·8	1·7	205	30	3·4	1·2	208	30	4·9	4·5	187	30	3·0	2·5
0·15 a. g. ...	30	7·7	6·6	339	30	7·6	7·2	275	30	4·6	4·3	231	30	4·0	4·0	225	30	6·4	6·0	199	30	4·2	3·5
0·6 a.s.l. ...	29	9·5	7·9	340	30	5·6	4·8	306	29	6·2	5·8	241	30	6·4	6·1	236	30	5·4	4·7	223	30	4·1	3·3
1·0 ,, ...	29	6·9	5·6	329	30	5·3	4·3	322	24	6·3	5·0	229	30	5·8	5·1	237	30	4·5	3·1	230	29	3·7	1·3
1·5 ,, ...	28	6·2	3·9	294	30	6·1	4·2	309	23	4·7	1·2	257	29	4·4	1·1	284	30	4·6	0·5	260	28	4·6	2·8
2·0 ,, ...	28	6·5	4·9	269	30	7·2	4·9	282	22	3·8	1·3	61	24	4·7	1·8	31	29	5·1	3·2	26	26	7·3	6·3
2·5 ,, ...	27	7·5	6·0	251	30	7·9	5·5	267	15	6·1	4·1	37	22	5·6	4·8	34	29	6·4	5·1	29	18	9·7	9·2
3·0 ,, ...	27	8·8	7·3	245	30	8·7	7·1	249	13	7·6	6·6	30	14	6·4	4·4	37	29	6·0	4·9	20	16	9·4	9·0
4·0 ,, ...	25	10·6	8·0	226	30	10·2	8·9	242	1	4·0	4·0	35	10	6·9	5·8	40	27	7·7	6·1	6	9	6·6	5·3
5·0 ,, ...	23	10·7	9·4	238	29	11·3	9·2	249					9	5·3	3·9	64	22	6·8	4·1	6	4	7·5	3·5
6·0 ,, ...	19	12·1	10·9	250	24	12·5	10·7	260					6	5·3	1·4	218	18	7·7	4·0	335	2	6·5	5·5
7·5 ,, ...	13	17·1	15·5	263	17	16·4	14·3	261					2	6·0	5·7	305	11	6·7	4·6	285			
9·0 ,, ...	5	26·0	25·7	251	11	23·4	19·5	251									6	7·2	3·6	293			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

APRIL 1950

STATION	MINICOY							
Time in I.S.T.	0730				1430			
Height in Km.	n	V	v	D	n	V	v	D
Surface ...	30	2·5	2·0	316	30	3·8	3·5	316
0·15 a. g. ...	30	4·2	3·5	321	29	4·9	4·7	323
0·6 a.s.l. ...	30	4·2	3·3	321	29	4·1	3·6	324
1·0 ,, ...	30	3·5	1·8	325	28	3·3	1·8	347
1·5 ,, ...	27	4·7	3·5	76	26	4·4	2·8	51
2·0 ,, ...	27	6·8	6·2	82	23	6·7	5·8	66
2·5 ,, ...	25	9·0	8·7	79	23	9·3	8·1	67
3·0 ,, ...	21	10·8	10·4	75	21	10·9	10·5	67
4·0 ,, ...	18	8·4	7·6	80	20	7·8	7·0	75
5·0 ,, ...	15	8·3	6·3	85	19	8·5	6·9	85
6·0 ,, ...	13	9·1	5·8	85	17	8·6	5·3	88
7·5 ,, ...	9	8·2	5·3	83	12	9·7	3·8	86
9·0 ,, ...	6	8·7	5·1	47	11	6·6	2·1	40

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

APRIL 1950

Height in Km.	n	V	v	D
		AHMEDABAD		
10	21	30·4	28·1	255
11	15	34·4	32·0	260
12	10	36·3	34·1	258
13	6	36·5	35·8	244
14	6	38·5	38·4	249
15	4	36·0	35·7	250
16	1	42·5	42·5	240
17	1	44·0	44·0	240
18	1	36·0	36·0	250
		ALLAHABAD		
10	3	31·3	31·2	270
11	1	31·0	31·0	265
12	1	40·5	40·5	260
		AMBALA		
10	4	35·3	34·5	254
11	1	39·5	39·5	265
		ANANTAPUR		
10	13	7·8	3·7	184
11	6	11·3	9·7	206
12	4	11·5	10·6	223
13	2	13·7	13·5	233
14	1	16·5	16·5	245
15	1	10·5	10·5	230
		BANGALORE		
10	22	5·6	1·5	170
11	11	7·5	4·1	211
12	9	7·5	4·8	217
13	5	5·3	2·5	222
14	2	5·5	3·3	48
15	2	6·0	3·5	68
16	1	4·5	4·5	255
17	1	5·0	5·0	65
		BHOPAL		
10	6	32·1	30·3	259
11	1	27·5	27·5	245
		BOMBAY		
10	13	19·4	17·9	252
11	7	20·4	20·0	245
12	7	21·4	20·6	245
13	5	18·9	18·2	246
14	3	18·5	18·5	244
15	1	12·5	12·5	255
16	1	17·0	17·0	255
17	1	38·5	38·5	265
18	1	34·0	34·0	255
		BOMBAY (*Contd.*)		
		CALCUTTA		
10	2	28·3	28·2	267
11	1	19·0	19·0	270
12	1	19·0	19·0	265
13	1	19·5	19·5	260
		COCHIN (Willingdon Island)		
10	7	5·4	2·9	146
11	7	6·4	4·1	157
12	4	9·1	7·9	147
13	2	5·0	5·0	192
14	2	3·0	2·9	183
15	2	4·3	4·3	171
16	2	3·7	3·3	199
17	2	6·5	5·7	167
18	2	7·0	3·7	108
19	2	8·3	7·3	96
20	2	11·7	9·7	105
21	1	8·5	8·5	115
22	1	6·0	6·0	90
23	1	6·5	6·5	95
24	1	7·5	7·5	105
25	1	5·5	5·5	110
26	1	4·0	4·0	140
		CUTTACK		
10	7	19·1	18·8	253
11	5	20·6	20·4	247
12	4	21·9	21·0	246
13	2	18·0	18·0	232
14	1	14·0	14·0	210
		DEOLALI		
10	10	18·9	18·1	248
11	6	22·1	21·7	241
12	1	22·0	22·0	240
		GADAG		
10	18	9·3	4·0	267
11	2	3·7	2·9	270
12	1	6·0	6·0	245
		GOPALPUR		
10	2	20·0	20·0	260
		HYDERABAD (Dn.)		
10	23	11·7	8·1	257
11	17	14·9	10·6	257
12	14	15·9	11·8	260
13	9	16·1	10·0	242
14	7	13·9	8·3	251
15	5	16·9	10·0	255
16	4	14·7	10·1	288
17	2	4·7	4·4	242
18	2	4·0	3·8	15
19	1	7·5	7·5	80
20	1	6·0	6·0	180
		JAGDALPUR		
10	26	11·9	10·9	262
11	21	12·1	11·4	255
12	17	12·2	11·6	254
13	15	11·7	11·3	254
14	14	12·0	9·8	227
15	9	8·4	7·7	249
16	7	7·9	6·6	246
17	6	8·9	7·4	222
18	4	8·7	5·2	189
19	3	15·2	7·3	206
20	3	14·3	2·7	190
21	1	8·0	8·0	75
		JHARSUGUDA		
10	8	22·9	22·0	265
11	3	27·8	27·2	266
12	2	25·5	25·5	260
		JODHPUR		
10	4	32·3	30·6	267
11	3	45·0	42·7	270
12	1	61·0	61·0	270
		JABALPUR		
10	7	31·2	30·5	258
11	2	35·7	34·9	252
		MADHOSAGAR		
10	3	27·2	27·1	273
11	1	30·5	30·5	275
12	1	46·5	46·5	285
		MADRAS		
10	20	7·1	1·2	189
11	13	8·4	2·3	179
12	12	10·9	5·5	
13	10	11·9	7·6	
14	8	13·6	9·2	
15	6	17·1	7·3	
16	4	19·9	4·6	
17	4	19·9	11·7	
18	3	14·8	7·2	
19	3	12·0	2·6	
20	2	6·5	4·7	
21	1	6·0	6·0	
22	1	12·0	12·0	
23	1	16·5	16·5	
24	1	19·5	19·5	
25	1	19·0	19·0	
		MADRAS (*Contd*)		
		MALEGAON		
10	18	19·1	17·8	
11	7	22·9	21·3	
12	4	26·7	25·5	
		MANGALORE		
10	14	10·0	3·2	
11	7	12·4	2·4	
12	4	6·6	2·0	
13	3	8·3	6·8	
		MASULIPATAM		
10	8	4·7	2·5	
11	3	4·7	3·2	
12	2	7·0	7·0	
13	1	7·5	7·7	
14	1	5·0	5·0	
15	1	4·5	4·5	
16	1	3·0	3·0	
17	1	8·5	8·5	
18	1	10·0	10·0	
		NAGERCOIL		
10	20	7·5	3·0	
11	8	8·9	4·9	
12	6	9·3	4·9	
13	5	8·5	4·8	
14	4	9·9	6·1	
15	2	10·5	10·5	
16	1	11·0	11·0	

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

APRIL 1950

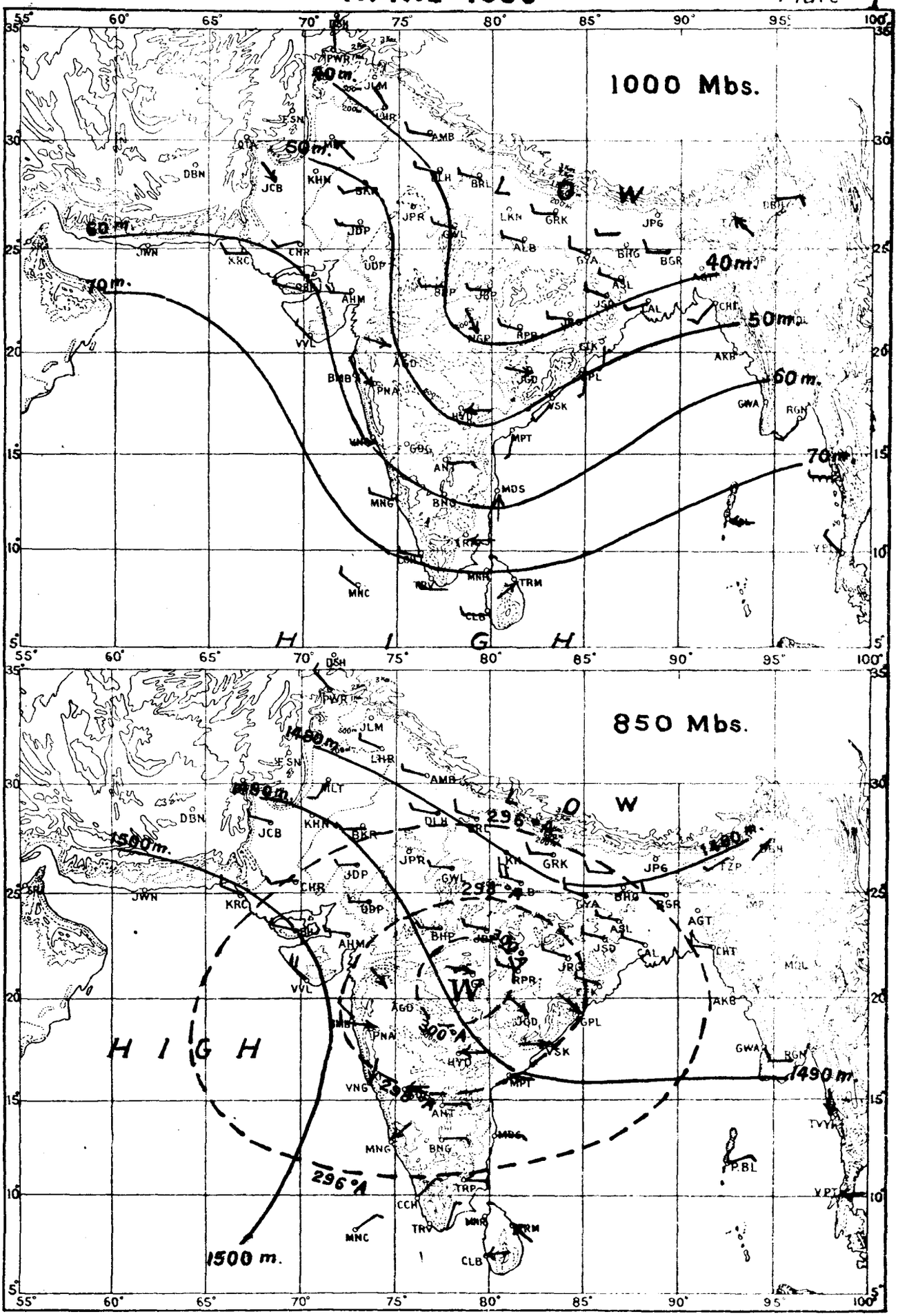
Height in Km.	n	V	v	D
	NAGERCOIL *(Contd)*			
17	1	13·0	13·0	90
18	1	14·0	14·0	120
	NAGPUR			
10	10	22·9	19·9	263
11	6	24·4	24·1	264
12	3	22·0	21·9	248
13	3	21·2	20·9	247
14	1	19·0	19·0	230
15	1	15·5	15·5	255
	NEW DELHI			
10	6	25·6	25·1	261
11	4	27·4	26·5	260
12	2	42·0	40·0	231
13	1	43·5	43·5	260
	POONA			
10	23	16·1	13·0	255
11	13	16·3	13·8	248
12	10	17·1	15·6	245
13	6	16·6	14·0	243
14	4	16·3	16·2	260
15	2	13·5	13·1	258
16	2	17·7	17·0	259
17	1	17·5	17·5	275
	PORT BLAIR			
10	4	5·1	4·5	89
11	4	6·0	5·3	137
12	4	9·4	9·0	135
13	2	14·5	13·3	130
14	2	14·3	14·2	118
15	2	13·7	13·7	118
16	2	8·0	7·9	108
17	1	13·0	13·0	125
	RAIPUR			
10	14	20·4	19·5	261
11	10	23·1	21·7	261
12	2	21·5	20·5	269
13	1	25·0	25·0	280
14	1	30·0	30·0	285
	TEZPUR			
10	1	27·0	27·0	310
	TIRUCHIRAPALLI			
10	7	12·4	4·9	195

Height in Km.	n	V	v	D
	TIRUCHIRAPALLI *(Contd.)*			
11	2	4·3	3·1	274
12	2	5·3	2·5	213
13	1	2·0	2·0	50
14	1	5·5	5·5	65
	UDAIPUR			
10	2	21·2	20·6	251
11	1	23·0	23·0	255
	VENGURLA			
10	8	11·4	9·5	233
11	1	10·5	10·5	220
12	1	10·0	10·0	235
13	1	13·0	13·0	240
	VERAVAL			
10	9	23·2	21·5	250
11	3	25·7	24·7	237
12	1	26·0	26·0	240
	VISAKHAPATNAM			
10	3	7·8	2·7	307
11	1	15·5	15·5	210
12	1	15·5	15·5	210
13	1	19·5	19·5	195
	MINICOY			
10	13	7·2	1·0	93
11	11	8·2	2·1	138
12	11	8·8	4·5	152
13	7	7·9	4·5	152
14	5	6·8	2·9	144
15	4	8·0	4·8	153
16	2	21·3	18·2	147
17	2	26·2	25·5	124
18	1	2·0	2·0	105
19	1	7·0	7·0	135
20	1	7·5	7·5	125
21	1	14·0	14·0	140
22	1	12·5	12·5	115
23	1	28·0	28·0	130
24	1	32·0	32·0	145

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

APRIL 1950

Plate I



RESULTANT WIND ——\= 5 Knots; ——\= 10 Knots; ——◣ = 50 Knots.

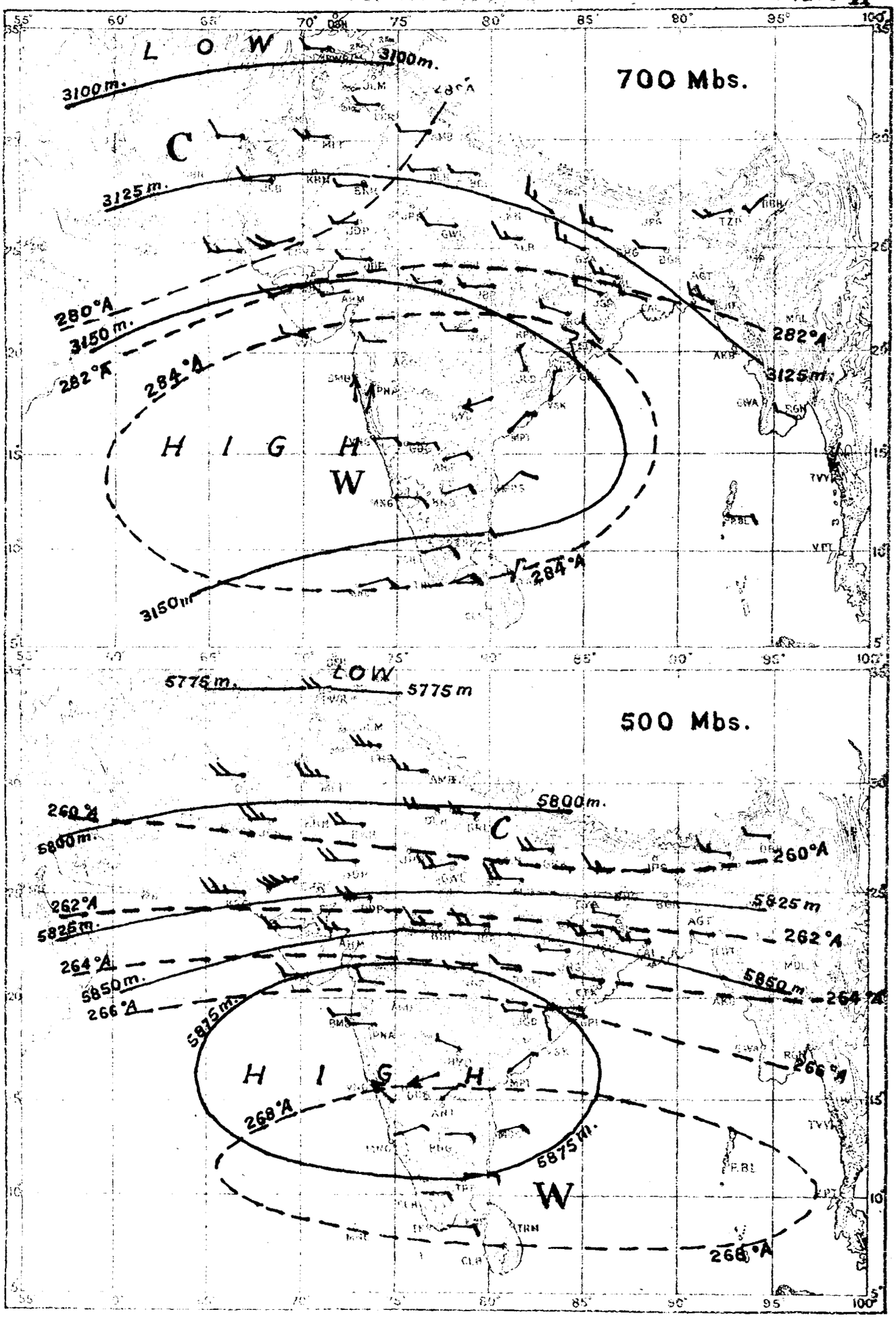
– – – – – Isotherms in degrees absolute. ——— Contours in geopotential metres.

G.P.O. POONA, 53.

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

APRIL 1950

Plate II



PERSISTANT WIND ——— 5 Knots, ——— 10 Knots, ——— 50 Knots.

– – – – – Isotherms in degrees absolute. ——— Contours in geopotential metres.

G.P.Z. - P.POONA, 53.

Registered No. B-3097

INDIA WEATHER REVIEW, 1950

MONTHLY WEATHER REPORT

MAY

Published by authority of the Government of India

CHIEF FEATURES:—(i) Dry weather over most of the country during the first fortnight; (ii) Advance of the southwest monsoon over Travancore-Cochin and Malabar-South Kanara towards the end of the month and excess of rainfall in the south Peninsula during the last week.

During the first two weeks of May, weather was dry over most of the country, only moderate thunderstorm activity prevailing in northeast India outside Orissa and in Mysore and the extreme south of the Peninsula. Thunderstorm activity increased in northeast India and commenced in the central parts of the country also in a feeble way after the 17th. Some of the the thunderstorms in West Bengal and Chota Nagpur during the third week were accompanied by violent squalls. Jamshedpur experienced a thunder-squall of 100 m. p. h. on the evening of the 18th. There were local thunderstorms or duststorms in east Rajasthan, the Punjab (I) and Uttar Pradesh between the 18th and 21st in association with movement of a low pressure area from Rajasthan to Bihar. A hailstorm which swept Ambala on the 18th night was accompanied by a squall of 75 m. p. h. and is reported to have caused considerable damage to crops and property in the neighbourhood.

The monsoon advanced into the Arabian Sea and the extreme southeast Bay of Bengal on the 22nd and a depression formed in the region of the Andaman-Nicobar Islands on the morning of the 23rd. The depression became deep during its northwestward motion towards the Sircars coast. On the evening of 27th, the deep depression was centred about 200 miles east of Masulipatam. Thereafter without appreciable movement, it weakened into a trough of low pressure and became unimportant by the 30th. Under the influence of this depression, the monsoon advanced into Travancore-Cochin on the 27th and into Malabar-South Kanara on the next day. Rainfall was widespread and locally heavy over these divisions between the 27th and 31st. The depression was also responsible for fairly widespread rain over the south Peninsula between the 26th and 29th.

Three western disturbances affected the country during May. The first two which moved during the first week of the month did not cause any precipitation while the third which moved eastwards through the Punjab (I) during the last week caused local thundershowers in the Punjab(I) and in and near the hills of west Uttar Pradesh on the 30th & 31st.

Following the rains in the last week, day temperatures were markedly below normal in the south Peninsula on the 27th and 28th being 15° to 20 °F below normal in and near north Tamilnad.

The total rainfall of the month was in moderate excess in west Uttar Pradesh and Rayalaseema, in slight excess in Chota Nagpur and Malabar-south Kanara and normal in Orissa, east Rajasthan, Deccan (Desh), coastal Andhradesa, Tamilnad, Mysore and Travancore-Cochin. It was in slight defect in Assam, West Bengal, Bihar, east Uttar Pradesh, and south Hyderabad, in moderate defect in the Bay Islands, the Punjab (I), Madhya Bharat, the Konkan and north Hyderabad and in large defect elsewhere, except in Gujarat and Saurashtra and Kutch where there was no rain. Averaged over the plains of India, the month's rainfall was 14% in defect.

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The mean maximum temperature was above normal in Bihar and the Punjab (I) and normal elsewhere. The mea minimum temperature was normal.

Relative humidity was in defect in east Rajasthan and normal elsewhere.

Cloud amount was in excess in Madhya Bharat, west Madhya Pradesh, Hyderabad, Rayalaseema and Tamilna and in defect in northwest India; elsewhere it was normal.

Table I contains the divisional and sub-divisional means of rainfall, temperature and humidity and cloud amount for the 13 chief political divisions and the 28 sub-divisions. The stations whose observations are used for preparin these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within th 24 hours ending at 8·30 hours I.S.T. of the date noted in the succeeding column; similarly the heaviest fall in 24 hours fo any station denotes the amount recorded during the 24 hours ending at 8·30 hours I. S. T. of the date given in th succeeding column.

POONA 5,
dated the 24th August, 1950

C. RAMASWAMY,
for Director General of Observatorie

	Rainfall				Departure from normal of				
							0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"	"	"		°	°	mb.	%	
1 Assam (including Manipur and Tripura)	8·59	11·06	-2·47	- 22	+1·4	+0·4	0	0	+0·3
2 West Bengal ...	5·85	6·63	-0·78	- 12	+0·2	+0·4	-0·1	-1	-0·2
3 Orissa ...	2·85	2·77	+0·08	+ 3	-0·1	+0·3	+0·8	+2	+0·1
4 Bihar ...	1·81	1·96	-0·15	- 8	+2·0	+0·9	+0·5	-1	0
5 Uttar Pradesh...	0·73	0·70	+0·03	+ 4	+1·1	+1·0	+0·4	0	-0·2
6 Punjab(I)(including PEPSU and Delhi) ...	0·41	0·58	-0·17	- 29	+2·2	+0·8	-0·4	-3	-0·7
7 Rajasthan ...	0·33	0·47	-0·14	- 30	+0·8	+0·9	-0·4	-2	-0·5
8 Madhya Bharat and Vindhya Pradesh	0·19	0·50	-0·31	- 62	+1·1	+0·3	+0·8	+3	+0·3
9 Madhya Pradesh	0·25	0·81	-0·56	- 69	+1·1	+1·4	-0·3	0	+0·7
10 Bombay (including Saurashtra & Kutch)	0·73	0·98	-0·25	- 26	-0·1	+0·3	-0·1	0	+0·1
11 Hyderabad ...	0·75	0·95	-0·20	- 21	+0·6	+0·8	-0·5	0	+0·9
12 Madras (including Travancore-Cochin	3·26	3·13	+0·13	+ 4	-0·2	+1·0	-0·8	-2	+0·5
13 Mysore ...	4·30	4·29	+0·01	0	+0·7	+0·6	-0·4	+2	+0·3
Mean of India ...	1·65	1·92	-0·27	- 14	+0·7	+0·8	-0·1	0	+0·2
Sub-Division									
1 Bay Islands ...	10·40	15·13	-4·73	- 31	+0·9	+1·5	+1·9	-1	+0·5
2 Assam (including Manipur and Tripura)	8·59	11·06	-2·47	- 22	+1·4	+0·4	0	0	+0·3
3 West Bengal ..	5·85	6·63	-0·78	- 12	+0·2	+0·4	-0·1	-1	-0·2
4 Orissa ...	2·85	2·77	+0·08	+ 3	-0·1	+0·3	+0·8	+2	+0·1
5 Chota Nagpur ...	2·47	2·10	-0·37	+ 18	+1·4	+0·5	+0·3	-1	+0·4
6 Bihar ...	1·48	1·89	-0·41	- 22	+2·4	+1·2	+0·6	-1	-0·3
7 Uttar Pradesh, East ...	0·57	0·75	-0·18	- 24	+0·8	+0·9	+0·5	+1	-0·2
8 Uttar Pradesh, West ...	0·89	0·64	+0·25	+ 39	+1·5	+1·2	+0·3	-1	-0·2
9 Punjab (I)including (PEPSU and Delhi)	0·41	0·58	-0·17	- 29	+2·2	+0·8	-0·4	-3	-0·7
10 Jammu and Kashmir	...	...	Data	incom	plete	...	...	...	...
11 Rajasthan, West	0·08	0·39	-0·31	- 79	+0·7	+0·9	+1·4	+2	-0·5
12 Rajasthan, East, (including Ajmer)	0·58	0·55	+0·03	+ 5	+0·9	+0·8	-2·3	-7	-0·5
13 Madhya Bharat	0·28	0·55	-0·27	- 49	+0·6	+0·7	-0·2	+2	+0·7
14 Vindhya Pradesh	0·06	0·42	-0·36	- 86	+1·7	-0·2	+2·1	+5	-0·2
15 Madhya Pradesh, East	0·34	1·24	-0·90	- 73	+1·4	+1·6	0	0	+0·4
16 Madhya Pradesh, West	0·20	0·54	-0·34	- 63	+0·9	+1·3	-0·5	0	+0·9
17 Gujarat ...	0	0·37	-0·37	-100	-0·3	+0·6	+0·1	-1	+0·1
18 Saurashtra and Kutch ...	0	0·29	-0·29	-100	-0·3	+0·6	-0·2	+2	-0·1
19 Konkan ...	1·54	2·09	-0·55	- 26	+0·8	+0·4	+0·7	-1	-0·2
20 Deccan (Desh)	1·10	1·14	-0·04	- 4	-0·2	0	-0·3	0	+0·3
21 Hyderabad, North ...	0·57	0·77	-0·20	- 26	+0·4	+0·7	-1·3	-1	+0·8
22 Hyderabad, South ...	0·92	1·13	-0·21	- 19	+0·7	+0·8	+0·2	+1	+1·0
23 Coastal Andhradesa	1·79	1·84	-0·05	- 3	-0·9	+0·3	-0·4	+1	+0·7
24 Rayalaseema	2·11	1·63	+0·48	+ 29	-1·4	+0·8	-0·6	+1	+0·8
25 Tamilnad	2·09	2·16	-0·07	- 3	+0·4	+1·5	-1·7	-5	+0·7
26 Malabar and South Kanara	9·02	7·73	+1·29	+ 17	+0·6	+1·3	-0·5	-2	+0·5
27 Mysore ...	4·30	4·29	+0·01	0	+0·7	+0·6	-0·4	+2	+0·3
28 Travancore-Cochin	10·05	10·23	-0·18	- 2	+0·5	+1·5	+0·2	0	+0·5

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relati humid %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs, I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Bay Islands																					
Port Blair ...	261	998·9	−1·0	996·7	87·6	+0·9	92	4	76·5	+1·5	73	1	84·5	81·2	78·9	77·3	32·5	+1·9	30·1	77	−1
Assam																					
Dibrugarh ...	348	995·2	−0·9	991·0	85·2	+0·7	95	19	70·5	−0·2	63	2,3	77·6	80·8	73·2	75·5	25·8	−0·8	27·5	82	−1
Sibsagar ...	317	996·5	−0·4	992·2	85·9	+0·7	94	14,18,30	72·4	+0·7	66	1,2,3	78·4	82·3	74·4	75·8	27·3	−0·2	27·5	83	−1
Tezpur ...	258	998·5	−0·6	993·9	88·4	+1·6	96	20	72·2	−0·1	67	4 days	78·2	84·0	74·0	76·5	27·1	+0·3	27·8	82	+1
Gauhati ...	182	1000·5	−0·3	995·7	90·2	+2·5	93	24	73·3	+0·9	67	2,4	79·9	85·0	74·3	76·1	26·6	−0·4	26·6	77	−2
Dhubri ...	115	1002·9	0	998·1	87·3	+1·5	94	18	73·7	+0·7	69	8,9	78·9	84·3	75·2	77·8	28·5	+1·1	29·6	84	+2
Silchar ...	96	1004·0	−0·4	999·3	90·1	+1·3	95	11,12,15	73·2	+0·6	66	2	80·4	85·5	75·7	78·7	28·7	+0·5	30·4	80	0
Tura ...	1215	965·5	...	962·0	88·0	...	92	12	72·3	...	67	4,6,8	79·4	83·2	74·7	78·1	27·5	...	30·7	80	...
West Bengal																					
Dum Dum ...	33	1003·6	...	999·4	96·2	...	100	15	78·5	...	72	17	87·0	89·9	79·2	80·1	30·2	...	30·3	70	...
Calcutta ...	21	1004·1	−0·3	999·9	95·8	+0·2	100	12,15	78·8	+1·3	72	22	86·8	90·1	80·3	81·3	32·4	+0·9	32·5	75	+1
Saugor Island ...	10	1004·4	−0·4	1001·0	89·4	−1·6	91	5 days	80·3	−0·3	73	22	86·7	85·7	80·9	81·0	33·1	−0·3	34·3	77	+2
Sandheads ...	32	1003·7	−0·6	1000·4	...	...	...	...	...	...	...	...	84·9	85·2	81·2	81·5	35·0	+0·9	35·3	84	+5
Midnapore ...	149	999·0	−0·7	994·7	99·9	0	107	2	76·7	−2·0	67	6	86·6	91·6	78·7	80·0	29·8	−0·4	29·9	70	+1
Contai ...	36	1002·8	...	999·6	91·4	...	94	15	79·3	...	71	17,18	86·5	86·8	80·4	81·0	32·8	...	33·2	76	...
Burdwan ...	106	1000·7	−0·5	995·8	98·4	+0·3	107	3	78·0	+0·5	71	17	85·1	93·4	78·1	79·5	29·7	−0·8	27·9	72	−2
Krishnagar ...	48	1003·3	−0·1	998·4	99·8	+3·2	107	3	77·8	+1·2	70	16	86·6	93·0	79·1	80·8	30·6	−0·1	30·7	70	−5
Asansol ...	414	989·8	−0·3	985·2	101·8	−0·4	111	1,4	78·0	−0·2	70	13,16	87·4	92·2	78·0	76·2	28·3	+0·4	23·6	64	+1
Berhampore ...	62	1002·6	−0·6	997·7	99·5	+2·4	109	3	77·5	+0·8	69	4	86·5	91·2	78·4	78·0	29·6	−0·3	27·0	68	−5
Malda ...	103	1001·2	−0·6	996·6	96·6	+1·2	108	3	76·6	+1·3	70	10	84·9	90·7	78·0	78·3	29·5	+0·9	27·3	72	+1
Cooch Behar ...	145	1001·6	...	996·7	89·9	...	95	19	72·7	...	67	9	80·2	85·5	74·4	77·1	26·2	...	27·8	75	...
Jalpaiguri ...	271	997·0	−0·3	992·3	86·5	−3·0	93	20	73·8	+1·2	68	6,9	78·5	85·3	73·3	75·8	26·0	−1·2	26·1	78	−1
Orissa																					
Balasore ...	65	1002·2	−0·3	998·9	94·9	+3·2	104	1	78·8	0	72	16	87·7	86·4	80·4	80·2	31·8	+0·8	32·7	72	+2
Chandbali ...	20	1003·6	−0·4	1000·2	97·6	+0·2	107	2	80·0	+0·8	72	20	87·9	87·1	81·2	80·3	32·8	+0·9	31·9	74	+1
Puri ...	20	1004·1	−0·4	1000·6	89·4	−0·2	92	25,27	81·8	+0·7	74	20,31	86·3	85·6	82·4	82·5	35·9	+1·8	36·7	84	+3
Cuttack ...	87	1001·2	−1·1	997·1	100·5	−0·9	109	9	81·0	+1·1	75	11,16,31	87·4	92·3	80·1	79·7	31·4	+0·2	29·1	72	+2
Gopalpur ...	56	1002·5	−0·7	999·4	90·7	+0·4	94	28	80·9	+0·8	77	12,16	86·1	84·7	81·9	81·3	35·6	+2·0	34·8	84	+5
Angul ...	455	988·8	−0·3	984·0	103·8	+0·3	109	2	80·4	+1·4	75	4,11,30	86·8	96·4	77·7	76·0	28·5	−0·1	21·2	65	−1
Sambalpur ...	486	986·8	−1·2	981·7	108·6	+2·1	113	4	78·7	−2·5	71	30	92·2	104·5	76·9	76·5	24·3	+0·2	18·4	48	0
Jharsuguda ...	726	978·8	...	973·5	...	...	...	...	...	...	...	...	91·9	101·3	76·9	73·7	24·8	...	16·0	49	...
Titilagarh ...	691	980·3	...	975·2	108·6	...	111	6 days	83·3	...	78	2	91·2	102·9	72·8	72·8	19·1	...	14·0	39	...
Chota Nagpur																					
Purulia ...	835	976·0	...	971·5	103·3	...	111	1	78·5	...	72	11,16	87·6	94·2	77·4	76·4	27·8	...	22·7	62	...
Jamshedpur ...	423	969·1	−0·3	984·7	103·5	+0·6	111	1	79·3	+0·1	70	19	87·8	93·8	77·2	74·7	27·2	+0·8	20·8	60	+2
Chaibasa ...	742	978·5	−0·5	974·2	105·3	+1·3	112	1	79·8	+0·6	70	11,19	87·7	93·5	77·0	74·8	27·1	+1·0	21·3	61	+2
Ranchi ...	3,150	932·9	+0·1	928·7	101·1	+2·5	107	5 days	76·8	+1·5	...	...	87·5	90·6	72·0	70·4	20·5	+1·2	17·4	48	+1
Hazaribagh ...	2,006	936·9	−0·1	933·8	100·6	+1·2	105	6 days	75·1	−0·4	70	11,17,18	88·1	92·4	70·7	69·4	19·2	+0·7	15·2	42	−3
Daltonganj ...	725	978·2	−1·0	973·4	107·7	+1·5	111	5,8	79·3	+0·6	71	3	94·2	102·4	72·1	71·1	17·0	−2·0	11·6	31	−9
Dhanbad ...	839	995·7	...	...	101·9	...	110	1,25	78·0	...	67	11	87·7	...	76·5	...	26·4	...	...	59	..
Bihar																					
Purnea ...	134	1000·9	−0·3	995·7	96·8	+2·0	105	24	75·1	+0·7	67	9	84·8	92·0	76·1	78·1	27·1	−0·1	26·4	66	−1
Saharsa ...	156	998·3	...	993·2	97·9	...	...	...	76·4	...	...	...	84·5	94·5	76·2	78·8	26·8	...	26·7	66	..

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from:—																	STATION
											0830 hrs. I. S. T.										1730 hrs. I. S. T.								
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs, I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
5·1	+0·5	6·8	10·40	−4·73	2·13	7	16	−0·3	6·9	−1·7	1	1	3	2	2	7	12	2	1	0	2	3	1	2	10	6	5	3	**Bay Islands** Port Blair
3·5	+1·1	4·7	11·49	−0·60	3·36	21	13	−2·6	1·4	+0·2	5	6	5	3	1	2	3	3	3	2	4	3	0	1	0	0	0	21	**Assam** Dibrugarh
6·7	+0·4	5·3	13·65	+1·59	2·98	1	18	+2·4	3·6	+1·2	4	8	4	3	2	1	1	3	5	3	12	1	0	4	2	0	1	8	Sibsagar
5·3	+0·1	3·9	8·03	−2·62	1·54	25	14	−1·3	3·5	+0·7	1	4	15	5	0	1	0	0	5	2	3	12	3	0	2	1	0	8	Tezpur
5·3	+0·3	4·5	3·90	−5·39	0·75	25	9	−4·5	3·0	+1·1	7	6	2	3	1	2	1	5	4	1	5	3	1	1	1	0	2	14	Gauhati
4·8	−0·2	2·7	12·08	−3·71	2·26	25	15	−0·5	4·8	−0·9	1	7	15	2	2	1	1	1	1	0	5	7	2	6	2	1	2	6	Dhubri
5·3	+0·3	3·5	19·48	+3·06	2·80	28	16	−0·4	1·0	−1·0	1	3	8	0	0	0	1	1	17	0	0	1	0	0	2	2	0	26	Silchar
5·1	...	3·0	15·44	...	3·59	8	14	...	5·6	...	0	2	2	6	4	9	3	0	5	0	0	1	7	2	17	0	0	4	Tura
4·7	...	3·8	3·06	...	1·46	17	5	...	10·0	...	0	1	3	5	11	10	1	0	0	0	1	1	2	19	8	0	0	0	**West Bengal** Dum Dum
4·7	+0·5	3·3	4·09	−1·40	0·83	17	7	+0·1	5·3	+0·3	0	2	5	4	14	3	1	0	2	0	0	1	7	17	6	0	0	0	Calcutta
3·6	−1·4	3·8	4·92	+0·40	1·77	22	6	+0·5	16·8	+3·3	1	0	3	3	11	12	0	0	1	0	0	1	7	18	5	0	0	0	Saugor Island
4·9	+1·1	3·5	4·90	+2·93	3·46	29	3	−0·2	...	...	0	0	0	3	8	16	2	1	1	0	0	0	3	15	12	0	0	1	Sandheads
2·8	−0·1	4·3	5·55	+0·81	1·18	22	9	+2·1	6·4	+2·1	0	0	3	3	11	12	1	0	1	0	0	0	1	19	6	2	1	2	Midnapore
4·6	...	4·3	3·84	...	0·98	28	6	...	12·5	...	0	0	2	2	10	14	1	0	2	0	0	0	3	25	3	0	0	0	Contai
2·5	−2·7	3·4	3·74	−2·22	0·97	13	9	+1·8	7·5	+4·3	0	2	6	3	6	13	0	0	1	0	2	3	6	9	7	1	0	3	Burdwan
4·3	+0·3	3·9	3·10	−3·61	1·30	11	5	−2·9	6·9	+1·3	1	1	3	4	19	1	1	1	0	1	0	1	8	17	0	0	2	2	Krishnagar
1·9	−1·2	3·3	4·16	+1·23	0·87	21	8	+3·6	...	..	0	0	1	16	10	0	2	0	2	0	0	4	13	5	1	3	2	3	Asansol
3·5	−0·9	5·8	4·14	−1·19	1·48	4	8	+0·7	4·2	+0·4	1	0	10	2	16	1	0	0	1	3	2	8	5	6	1	3	1	2	Berhampore
4·0	+0·6	3·5	5·82	+1·22	3·25	20	7	+1·4	5·6	0	0	2	11	12	6	0	0	0	0	2	4	10	9	4	1	0	0	1	Malda
5·9	...	3·5	14·51	−3·26	3·02	8	14	−1·5	4·0	...	1	11	15	0	1	1	0	0	2	4	7	6	1	2	1	0	1	9	Cooch Behar
5·8	+3·0	3·5	12·40	+0·58	4·69	22	13	−0·1	4·3	+1·8	2	11	10	1	0	0	0	1	6	3	9	4	2	2	1	0	1	9	Jalpaiguri
4·1	+0·6	5·4 (a)	5·83	+1·20	1·70	18	7	+1·1	7·0	+1·3	0	2	1	2	12	11	0	0	3	1	0	0	12	13	1	2	0	2	**Orissa** Balasore
4·1	−0·6	3·4	6·45	+0·87	2·97	29	5	−0·4	10·6	+0·5	2	0	1	3	14	10	1	0	0	0	1	2	22	4	1	0	0	0	Chandbali
5·1	+1·3	4·6	3·82	+0·96	1·88	31	5	+1·8	15·1	+1·8	0	1	1	4	6	19	0	0	0	0	1	1	2	9	18	0	0	0	Puri
3·8	−0·1	4·3	2 31	−1·26	1·21	29	6	+0·8	5·2	+1·4	0	2	0	2	5	6	4	0	12	1	1	0	3	11	9	1	1	4	Cuttack
2·8	+0·4	5·3	4·46	+2·33	3·30	29	3	−0·1	12·9	+0·1	0	1	1	1	10	14	0	0	4	2	0	2	2	10	13	1	1	0	Gopalpur
3·1	−0·4	5·2	0·68	−1·67	0·23	6	4	−0·7	7·0	+1·4	4	8	7	6	2	0	0	1	3	2	3	6	11	4	3	1	1	0	Angul
0·9	−1·5	3·7	0	−1·08	0	...	0	−2·3	4·3	+1·0	0	3	3	5	9	8	2	0	1	3	2	4	4	3	5	6	1	3	Sambalpur
2·0	...	4·2	0·28	...	0·15	30	2	...	...	...	0	1	6	11	6	1	0	0	6	1	1	1	0	2	6	5	4	11	Jharsuguda
2·2	...	4·5	0·08	...	0·08	16	0	...	4·0	...	0	1	1	6	10	9	3	0	1	3	4	1	5	4	4	4	2	4	Titilagarh
3·3	...	5·8	2·55	...	0·88	25	6	...	3·2	...	1	3	1	10	11	2	1	0	2	2	1	4	11	1	3	3	2	4	**Chota Nagpur** Purulia
1·8	−1·0	5·3	5·16	+2·03	1·41	16	8	+2·9	5·3	+1·1	1	2	3	3	1	6	10	2	3	2	2	4	8	4	2	3	4	2	Jamshedpur
3·6	+1·1	7·2	2·68	−0·06	1·10	11	4	−1·2	2·9	+0·3	0	1	0	3	6	11	4	1	5	6	6	0	5	3	1	2	3	5	Chaibasa
1·8	−0·4	3·6	2·47	+0·35	0·96	17	6	+1·9	4·2	−0·7	2	0	0	3	10	5	0	1	10	1	1	3	3	3	1	3	2	14	Ranchi
4·0	+1·6	4·7	2·03	+0·07	0·80	17	4	+0·6	6·2	−0·9	1	0	0	3	8	11	2	2	4	4	1	2	3	4	4	2	11	0	Hazaribagh
1·9	+0·5	3·3	0	−0·57	0	...	0	−1·3	3·8	−0·6	3	1	7	5	2	0	5	3	5	5	1	3	1	1	0	1	18	1	Daltongan
...	...	...	1·91	...	0·76	16	4	...	5·4	...	0	2	7	5	8	6	2	0	1	...	...	...	...	...	...	...	...	...	Dhanbad
3·7 (l)	+0·3	3·0	1·42 (l)	−2·76	0·72	9	4	−1·5	5·3 (l)	+1·9	0	7	23	1	0	0	0	0	0	0	1	14	4	0	0	1	1	10	**Bihar** Purnea
2·2	...	1·6	0·06	...	...	...	...	...	6·6	...	0	2	16	1	0	0	0	0	0	2	5	9	1	0	0	2	0	0	Saharsa

STATION	Height of bar, cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Re hu
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Bihar *(Contd)*																				
Darbhanga ...	161	998·7	−0·6	994·2	99·2	+3·0	106	4	77·1	+1·6	71	9,30	86·0	94·5	76·7	77·9	26·9	+1·4	25·2	64
Motihari ...	218	996·4	−0·7	991·9	99·7	+2·6	105	25,27	74·7	0	69	2,29	80·8	92·5	76·4	78·7	26·2	−0·1	22·4	61
Patna ...	173	997·4	−0·8	992·8	102·3	+2·0	110	25	79·2	+1·1	74	9	87·0	98·5	75·0	75·8	24·2	−1·0	20·4	56
Dehri ...	352	990·1	...	985·9	107·8	...	112	4,5,25	81·9	...	75	16	89·5	102·5	72·7	74·1	19·6	...	15·8	43
Gaya ...	365	990·0	−1·0	985·3	107·3	+2·7	112	4,25	82·1	+2·3	73	16	93·5	103·0	74·6	74·9	20·6	+0·9	16·9	40
Dumka ...	489	987·6	−0·4	982·8	100·1	+1·1	111	1	77·8	+0·5	68	5	85·4	91·9	77·9	76·7	29·2	+2·8	24·8	70
Sabour ...	122	999·8	−0·3	995·0	100·6	+2·3	108	1,25	77·0	+1·3	71	10	87·2	93·0	77·8	77·1	28·1	+2·3	24·4	65
U. P., East																				
Gonda ...	360	991·5	...	987·1	103·6	+0·9	110	25,26	78·5	+0·7	71	3	87·6	100·8	73·9	75·1	22·4	+1·8	18·3	49
Gorakhpur ...	254	994·8	−0·8	990·2	102·1	+1·0	107	3,9,26	78·8	+1·9	71	19,20,21	87·2	99·4	74·3	74·4	22·8	−1·6	17·3 (h)	53
Azamgarh ...	255	993·8	...	987·1	105·4	...	112	25	79·7	...	71	3	91·8	102·7	83·8	93·1	36·2	...	47·7	81
Banaras ...	250	993·8	−1·2	989·2	106·9	+1·5	111	25,26	80·9	+1·7	73	3	90·3	104·8	75·0	72·3	22·3	+0·6	12·5	47
Allahabad ...	322	991·3	−1·5	987·3	107·5	+0·4	111	4 5,7	81·1	+1·2	75	3,4	92·1	104·3	72·7	72·3	18·4	0	12·3	37
(Bamrauli)																				
Fatehpur ...	375	989·8	...	986·1	108·0	+0·8	112	5,7	80·3	+0·2	71	20	89·9	105·6	74·0	78·3	21·4	+0·5	20·7	45
Banda ..	3398	988·9	...	984·6	110·6	...	118	9	81·2	...	73	3	94·3	108·1	72·4	76·8	16·8	...	17·6	33
Kanpur ...	414	988·3	−0·9	984·5	106·3	+0·1	111	5,7	80·0	−0·4	70	20	90·6	103·8	71·1	72·8	17·1	−0·8	13·7	37
Lucknow ...	371	990·2	−0·7	986·5	105·4	0	110	4,26	73·4	+0·1	70	8	88·6	101·8	73·3	74·9	21·3	+1·1	17·4	47
Bahraich ...	407	989·7	−0·1	985·9	104·0	+1·7	111	25,26	78·7	+1·5	72	1,2,3	89·1	100·7	74·9	75·6	23·3	+1·2	19·1	51
U. P., West																				
Jhansi ...	823	975·5	−0·7	970·9	110·2	+1·7	116	30	82·7	+0·1	75	2,3	93·2	106·6	90·7	72·9	15·3	−0·5	13·0	30
Agra ...	553	984·4	−0·2	979·7	107·5	+1·3	113	29,30	81·0	+2·8	72	2	90·5	105·0	70·1	72·2	15·9	+1·9	12·1	33
Mainpuri ...	516	984·9	−0·7	981·0	108·2	+0·8	112	4,5,7	79·1	+0·9	70	8	90·9	104·2	72·1	75·2	18·5	+0·8	16·5	37
Aligarh ...	615	981·8	..	977·8	107·3	+2·0	112	29	79·4	0	72	1	89·9	102·8	71·9	75·2	18·7	+3·9	16·0	39
Bareilly ...	568	983·1	−1·0	979·1	105·1	+2·0	109	4	78·4	+1·3	71	20	89·4	102·5	70·4	72·4	16·8	−3·8	13·7	36
Meerut ...	728	977·6	...	...	104·6	...	109	28	78·7	...	72	2,3	90·0	...	70·0	...	16·0	...	...	37
Roorkee ...	899	972·1	−1·0	968·1	103·3	+1·1	107	5,27,28	76·6	+2·6	68	10	87·8	100·6	68·5	70·6	15·6	−0·5	12·3	34
Dehra Dun ...	2239	928·9	−0·4	925·7	97·8	+1·8	101	6,26	71·0	+0·9	64	30	83·3	94·3	66·4	78·3	14·9	+0·8	12·8	40
Punjab (I)																				
New Delhi ...	710	978·4	−0·7	974·5	104·8	0	109	28,29	79·5	+0·7	71	9	89·6	101·6	68·8	70·6	16·4	−0·2	13·8	31
Hissar ...	725	978·0	−0·6	914·6	108·2	+2·9	115	29	77·0	+1·0	67	1,2	86·3	104·6	69·7	74·2	17·2	+0·3	14·8	41
Karnal ...	818	974·3	...	970·7	104·4	...	109	7,28	78·2	...	70	2,15,20	87·2	101·9	67·6	70·4	14·2	...	11·2	32
Ambala ...	892	971·4	−1·5	967·4	106·7	+2·8	112	28	76·9	+1·1	68	2	88·0	103·5	68·4	70·7	14·9	−0·5	10·0	33
Patiala ...	822	974·2	...	969·6	104·5	...	110	28	75·8	...	66	31	87·6	101·1	70·1	73·0	17·5	...	15·0	38
Ludhiana ...	810	974·2	−1·3	971·5	107·2	+3 1	114	28	76·0	+0·3	69	1,2,8	88·5	104·0	68·1	70·9	14·1	−1·3	11·0	31
Ferozepore ...	657	979·7	...	977·3	104·7	...	114	29	74·1	...	63	2	87·4	101·4	70·9	74·7	20·3	...	16·6	38
Amritsar ...	756	976·5	...	973·5	104·4	...	111	28,29	72·0	...	65	12	86·0	100·7	71·9	76·5	20·4	...	20·3	47
Jammu & Kashmir																				
Srinagar ...	5,205	841·3	+0·8	838·9	71·4	−5·6	87	18	52·2	+1·3	48	1,25	59·7	69·3	55·3	58·9	13·4	−0·5	13·0	77
Gulmarg ...	8,709	...	..	...	...	...	...	Closed	during	winter	months	...	...	...	...	...	...	...	...	...
Dras (R) ...	10,059																			
Leh ...	11,539	667·8	+0·2	665·4	60·3	−3·4	66	18,19,20	36·9	−0·2	33	3,6	46·6	56·2	35·6	40·3	3·7	−0·8	3·5	37
Skardu (R) ...	7,505																			
Gilgit (R) ...	4,890																			
Misgar (R) ...	10,190																			

(R) Register not received. (h) Mean of 23 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from ;—																	STATION
											0830 hrs. I. S. T.									1730 hrs. I. S. T.								
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 h.s. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bihar *(Contd)*
1·7	−0·7	1·2	2·20	−0·31	0·82	29	5	+1·5	5·0	+0·6	0	10	18	1	1	0	0	0	1	1	6	11	3	1	2	4	1	2	Darbhanga
1·9	+0·1	1·1	2·39	−0·25	1·80	29	2	−1·8	4·5	−0·5	1	0	28	0	0	0	2	0	0	0	0	11	0	0	0	1	1	18	Motihari
1·7	−0·1	0·9	0·89	−0·51	0·81	20	1	−1·3	6·3	+1·2	1	18	9	2	0	0	1	0	0	5	16	2	1	0	0	3	4	0	Patna
3·2	...	2·1	0·31	−0·32	0·22	16	1	−0·2	4·8	...	2	3	4	6	2	8	0	4	2	2	10	2	0	0	2	0	14	1	Dehri
1·5	−0·1	2·0	0·72	−0·21	0·42	16	2	+0·3	7·0	+1·0	1	3	9	6	1	5	4	0	2	7	8	2	0	1	0	7	6	0	Gaya
1·2	−1·5	2·7	3·89	+0·28	1·54	11	6	+0·9	4·9	+1·9	0	1	6	16	4	2	2	0	0	0	5	4	12	3	2	5	0	0	Dumka
2·8	−1·0	3·0	3·03	+0·88	1·87	20	3	−0·6	6·8	−0·1	2	4	16	4	4	1	0	0	0	2	3	8	8	2	0	0	7	1	Sabour
																													U. P., East
0·3	−0·7	0·6	1·37	+0·34	0·74	19	2	+0·1	5·1	0	1	1	22	0	0	0	4	1	2	2	0	8	0	0	0	5	5	11	Gonda
0·9	−0·5	0·5	1·30	−0·08	0·87	19	3	+0·5	4·1	+1·2	3	3	21	0	0	0	2	0	2	4	3	8	0	2	0	13	0	1	Gorakhpur
0·9	...	0	0	...	0	...	0	...	...	...	0	3	18	1	0	4	2	1	2	1	0	6	1	1	2	12	2	6	Azamgarh
1·1	−0·3	0·6	0·41	−0·12	0·33	16	1	−0·1	...	...	3	5	8	1	1	5	3	2	3	4	3	1	0	0	0	10	11	2	Banaras
1·2	−0·2	1·0	0·13	−0·50	0·13	15	1	−0·2	4·5	−0·2	1	9	4	1	3	3	7	1	2	3	5	3	0	0	1	6	13	0	Allahabad (Bamrauli)
1·7	+0·4	1·9	0·23	+0·09	0·23	20	1	+0·4	4·2	+0·2	0	0	9	3	1	1	5	3	9	0	0	5	1	0	0	3	13	9	Fatehpur
0	...	0·4	0·17	...	0·17	31	1	...	3·5	...	0	1	0	0	0	0	30	0	0	0	0	1	0	0	0	27	3	0	Banda
1·1	+0·4	0·5	0·57	+0·25	0·57	20	1	0	7·1	−0·8	1	2	7	4	0	5	6	2	4	5	2	3	1	0	4	8	6	2	Kanpur
0·8	−0·4	0·4	0·37	−0·40	0·24	31	2	+0·7	3·0	+0·5	4	1	15	1	3	0	7	0	0	3	2	6	0	1	2	8	8	1	Lucknow
0·8	−0·4	0·5	0·19	−1·02	0·10	20	1	−1·1	5·9	+1·4	0	0	13	10	1	0	3	2	2	0	0	6	2	0	2	7	5	9	Bahraich
																													U. P., West
1·3	+0·1	2·7	0·28	−0·09	0·25	31	1	0	6·5	+2·2	3	1	0	0	0	4	8	4	11	1	1	1	0	0	4	16	3	5	Jhansi
1·6	+0·5	1·1	0·99	+0·61	0·99	20	1	−0·1	2·7	−1·8	0	0	4	0	0	0	3	1	23	1	1	0	0	1	3	3	8	14	Agra
1·9	+0·5	1·2	1·24	+0·73	1·24	20	1	−0·2	2·8	+0·1	3	0	3	4	2	3	3	4	9	0	0	2	6	0	4	10	1	8	Mainpuri
0·8	+0·1	1·3	0·35	−0·06	0·35	31	1	−0·2	4·2	−1·0	2	0	3	5	0	0	3	5	13	3	0	3	1	1	0	2	9	12	Aligarh
0·3	−1·1	0·3	0·57	−0·09	0·57	20	1	−0·5	4·0	+1·1	2	4	7	5	2	0	6	4	1	0	0	3	1	0	0	17	5	5	Bareilly
0	...	...	0·50	−0·10	0·50	20	1	−0·5	5·6	...	1	1	5	5	0	0	3	5	11	...	...	...	...	...	...	...	...	...	Meerut
0·7	−0·6	1·2	0·75	−0·03	0·69	20	1	−0·7	4·0	+0·8	1	2	0	14	0	1	0	3	10	0	2	0	7	0	1	0	18	3	Roorkee
0·9	−1·0	1·8	2·47	+1·02	13·5	20	3	0	2·7	+0·4	0	2	0	1	1	6	4	0	17	0	2	0	0	1	14	6	3	5	Dehra Dun
																													Punjab (I)
0·5	−0·9	2·0	0·54	+0·02	0·53	31	1	−0·6	9·0	...	1	1	3	5	1	5	7	7	1	5	5	5	1	1	1	3	10	0	New Delhi
0·2	−0·8	0·6	0·17	−0·37	0·17	5	1	−0·4	5·3	+0·3	3	1	0	5	4	7	3	2	6	4	1	1	2	1	5	7	10	0	Hissar
0·9	...	1·1	0	...	0	...	0	...	4·7	...	0	2	4	4	3	1	3	8	6	1	0	3	3	1	2	7	12	2	Karnal
0·2	−0·9	0·3	0·46	−0·27	0·25	31	2	+0·5	6 6	+2·9	1	0	0	8	1	0	0	5	16	1	0	2	1	0	0	6	7	14	Ambala
1·0	...	0·8	0·66	...	0·66	31	1	...	6·5	...	6	0	0	10	0	0	1	4	10	10	0	1	4	0	1	1	9	5	Patiala
1·0	−0·2	0·7	0·46	−0·07	0·46	31	1	−0·5	3·7	+1·4	0	4	4	6	1	0	4	9	3	0	3	0	3	0	1	3	9	12	Ludhiana
0·5	...	2·3	0·35	...	0·35	11	1	...	2·3	...	2	4	2	2	4	1	2	2	12	5	1	0	0	1	6	1	12	5	Ferozepore
1·6	...	1·2	0·11	...	0·06	13	0	...	4·8	...	9	3	5	6	2	1	0	2	3	4	3	3	2	1	0	5	12	1	Amritsar
																													Jammu & Kashmir
3·5	+0·6	4·8	3·26	+0·88	1·46	24	7	+1·6	2·5	−0·3	3	2	1	11	2	0	3	3	6	4	2	0	2	1	2	3	9	8	Srinagar
																													Gulmarg
																													Dras (R)
3·5	0	4·2	0·12	−0·10	0·05	3	0	−0·7	4·9	+2·1	0	1	0	3	2	4	0	0	21	2	2	0	1	1	8	5	6	6	Leh
																													Skardu (R)
																													Gilgit (R)
																													Misgar (R)

STATION	Height of bar cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relati humid %	
		Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Rajasthan, West																					
Sri Ganganagar ...	580	982·1	...	(c) 978·7	106·0	+1·7	113	29	76·6	+1·6	64	1	88·5	102·6	68·7	72·6	15·2	+1·0	13·6	33	+2
Bikaner ...	734	977·3	-1·1	973·8	108·6	+0·9	117	29	81·8	+0·1	69	2	89·3	107·2	68·8	70·7	14·7	+0·3	8·9	29	-3
Jaisalmer ...	793	975·7	...	972·5	108·0	...	115	29	78·9	...	73	14	84·9	107·0	74·8	77·8	25·1	...	19·5	64	..
Jodhpur ...	736	979·2	+0·9	975·6	107·2	+1·8	113	29	81·4	+2·0	72	1	86·9	105·5	72·8	74·3	21·4	+4·0	14·6	46	+4
Phalodi ...	783	977·0	...	974·1	108·1	...	115	19	80·9	...	72	1	86·9	106·7	70·9	76·8	18·7	...	17·7	41	...
Barmer ...	638	982·0	-0·3	981·3	108·1	+1·7	115	29	80·0	0	73	11	85·9	106·3	75·8	80·6	26·1	+0·2	23·6	66	+5
Rajasthan, East																					
Sikar ...	1418	956·0	...	952·1	105·2	...	111	29	76·5	...	63	1	89·0	101·0	75·1	81·1	23·3	...	27·0	50	...
Jaipur ...	1431	955·4	-1·1	952·0	106·0	+0·4	113	29	78·2	+1·3	71	1	91·2	102·0	69·0	68·9	14·2	-0·8	9·2	29	-8
Ajmer ...	1593	950·5	-0·9	946·9	104·5	+1·6	111	29	81·4	+1·2	69	1	88·6	102·6	67·5	67·7	14·9	-3·2	8·8	32	-7
Kotah ...	843	974·8	-1·2	970·8	108·4	+0·8	116	30	85·5	+1·0	75	22	93·9	105·4	69·3	70·4	13·5	-1·5	9·6	25	-4
Jhalawar ...	1053	968·0	-0·8	963·5	107·9	+0·9	114	29,30	80·2	-0·2	73	1,2,21	88·9	105·6	70·3	72·5	17·1	-3·5	12·2	36	-7
Udaipur ...	1910	941·2	...	937·9	102·4	...	109	29	78·7	...	71	1	87·9	99·5	68·5	68·6	15·0	...	9·8	37	...
Madhya Bharat																					
Gwalior ...	681	979·0	...	975·2	109·6	...	116	30	81·5	...	71	2	95·3	105·6	68·9	69·7	12·3	...	8·5	22	...
Guna ...	1571	950·8	-0·9	947·4	106·8	+0·5	113	29,30	77·6	+0·1	68	2	91·0	102·5	69·2	70·7	15·5	+0·8	12·7	32	+3
Neemuch ...	1626	950·5	-0·7	946·3	105·2	+1·8	113	29	79·1	+1·7	74	9	87·1	102·4	72·5	75·5	21·3	+0·8	19·1	49	+2
Ratlam ...	1596	952·6	...	948·2	103·6	...	109	28,29	78·0	...	76	1,10	83·7	100·9	70·1	78·6	19·2	...	23·2	51	...
Indore ...	1839	943·7	-1·1	939·9	103·4	-0·8	110	29	75·3	-0·2	69	1	84·9	100·6	70·4	71·1	19·5	-2·7	14·0	48	0
Bhopal ...	1643	949·2	-1·0	945·4	105·3	+0·9	113	29	80·2	+1·2	75	22,23	88·2	101·6	68·0	69·6	15·1	+0·4	11·4	34	+3
Bairagarh ...	1714	947·1	-0·7	943·2	105·5	+0·8	111	29	77·7	-1·3	73	4 days	88·5	101·1	67·2	68·7	14·3	-0·8	11·9	32	+1
Madhosagar ...	757	976·9	...	972·9	109·2	...	115	29,30	(a) 82·9	...	74	1	93·7	105·2	69·0	70·8	13·2	...	10·2	25	...
Vindhya Pradesh																					
Nowgong ...	750	977·5	-1·0	972·9	108·7	+1·2	114	30	78·4	-1·0	70	2	93·5	106·1	73·2	76·6	18·7	+2·0	17·8	36	+3
Sutna ...	1041	967·5	-1·0	963·3	108·4	+2·6	112	15,30	79·6	-0·2	71	3	93·4	104·5	73·8	76·3	19·6	+4·2	18·0	38	+8
Umaria ...	1506	953·0	...	948·6	106·9	+1·4	111	30	79·5	+0·5	69	2	93·0	103·5	69·1	70·1	14·5	0	11·5	29	+3
Madhya Pradesh East																					
Gondia ...	1026	969·2	...	964·4	107·8	...	111	15,30	82·7	...	77	3,9,10	92·7	104·8	71·9	73·5	17·3	...	14·0	34	...
Pendra ...	2040	935·6	-1·0	931·6	103·5	+3·2	107	15	78·5	+1·2	73	2,12	90·5	97·6	68·5	69·0	14·9	-0·6	12·6	31	-2
Champa ...	805	975·8	...	971·1	109·6	...	112	1,15,25	83·9	...	78	1	91·8	106·1	74·6	76·6	21·4	...	17·8	42	...
Raipur ...	979	970·2	-1·1	965·6	107·9	+0·6	110	4,15	83·9	+1·8	78	4	92·6	105·3	73·7	75·1	20·6	+3·3	15·8	37	+4
Kanker ...	1318	959·7	-0·4	955·1	105·7	+1·3	108	4,18	82·5	+3·2	75	3	91·2	103·5	75·3	77·3	22·7	+3·1	20·1	46	+6
Chanda ...	634	983·1	-0·7	977·3	109·5	+0·1	113	4	83·2	+1·1	74	9	93·4	107·1	70·3	71·4	14·9	-3·4	10·8	28	-5
Jagdalpur ...	1815	944·1	-0·7	939·7	103·0	+1·6	107	2,18	75·5	+0·8	70	4,6,12	86·1	93·0	71·9	71·2	21·0	-2·3	17·4	50	-5
Madhya Pradesh West																					
Buldhana ...	2133	934·6	...	931·0	100·9	...	105	28	79·3	...	71	20	81·5	98·9	67·6	71·2	17·4	...	14·8	50	...
Akola ...	925	973·6	-1·0	968·7	108·3	+0·1	113	29	83·0	+1·7	74	20	88·8	105·6	70·5	73·0	17·2	-0·2	12·9	38	+2
Amravati ...	1213	963·7	-1·0	959·0	108·1	+0·5	112	29	83·0	+1·3	77	20	88·7	103·8	...	...	...	...	...	...	...
Yeotmal ...	1481	955·1	...	950·7	108·1	...	111	13,14,15	82·2	...	77	9,20	90·8	104·1	70·1	71·0	15·7	...	10·9	35	...
Khandwa ...	1044	969·8	-1·0	964·9	107·3	+0·4	112	28	82·3	+1·2	72	8	88·9	103·9	71·7	73·2	18·7	+0·4	14·0	41	+1
Hoshangabad ...	992	970·8	-1·2	965·9	107·5	+0·6	113	29	80·7	-0·3	74	1	88·1	104·6	68·1	72·6	14·5	-1·2	12·8	31	-1
Sagar ...	1808	942·9	-1·4	939·3	105·3	+0·7	111	30	81·5	+2·2	78	6 days	89·4	101·2	64·1	65·9	10·2	-3·3	7·4	22	-6
Jabalpur ...	1389	960·1	-1·0	955·7	108·2	+2·8	114	30	77·4	+0·1	69	2,3	91·8	104·0	68·6	70·5	13·3	-1·2	10·3	26	-3
Seoni ...	2027	936·6	-1·0	932·8	104·8	+1·2	110	30	78·0	+1·7	69	17	90·8	99·6	69·7	71·5	15·8	+1·6	14·5	33	+4

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																				STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.										
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		53
																														Rajasthan, West
0·4	0	0·5	0·03	−0·20	0·03	21	0	−0·8	5·0 (d)	−1·7	3	1	1	5	4	9	1	4	3	5	0	1	0	0	4	4	18	5		Sri Ganganagar
0·3	−0·6	1·0	0	−0·59	0	...	0	−1·3	5·9	−0·4	0	2	0	6	0	17	1	2	3	0	3	0	0	1	15	1	9	2		Bikaner
0·4	...	1·6	0	...	0	...	0	...	12·9	...	0	1	0	0	1	29	0	0	0	0	0	0	0	0	26	0	5	0		Jaisalmer
0·2	−0·8	0·5	0	−0·41	0	...	0	−1·1	6·7	−4·0	0	1	1	1	0	17	8	2	1	0	0	0	0	1	9	19	4	0		Jodhpur
0·5	...	0·7	0·38	+0·03	0·18	31	2	+1·2	11·8	...	0	2	0	2	4	17	5	1	0	3	1	0	0	5	14	7	1	0		Phalodi
0·3	−0·4	0·3	0	−0·35	0	...	0	−0·7	8·0	+1·1	0	0	0	1	4	18	6	1	1	0	5	0	1	4	16	3	1	1		Barmer
																														Rajasthan, East
0·6	...	2·2	0·56	...	0·31	22	1	...	7·6	...	1	1	4	2	7	5	8	2	1	1	0	3	0	1	5	9	12	0		Sikar
0·1	−0·9	1·4	0·95	+0·38	0·57	22	3	+1·4	5·7	+0·3	2	1	3	0	0	1	6	8	10	4	0	2	0	0	0	6	18	1		Jaipur
0	−1·0	1·1	0	−0·64	0	...	0	−1·5	8·8	+2·3	1	3	0	0	1	19	6	0	1	0	1	0	0	1	11	14	4	0		Ajmer
0·5	−0·4	1·6	0·48	+0·01	0·39	21	1	0	5·6	+1·5	0	0	0	0	1	5	17	5	3	1	0	1	0	0	3	14	8	4		Kotah
0·9	+0·1	2·1	1·31	+0·96	0·47	31	4	+3·1	6·0	+0·8	0	0	2	0	0	3	17	4	5	2	2	1	0	1	4	13	7	1		Jhalawar
0·5	...	1·5	0·14	−0·58	0·14	22	1	−0·5	5·1	...	3	1	1	1	4	5	8	8	0	1	1	1	1	5	13	5	4	0		Udaipur
																														Madhya Bharat
0·4	...	1·9	0·05	...	0·05	21	0	...	3·5	...	3	1	2	1	4	3	7	5	5	3	1	2	1	1	4	7	12	0		Gwalior
1·4	+0·6	2·5	0·52	−0·02	0·30	20	2	+0·8	6·8	+1·2	2	1	1	1	0	3	19	3	1	0	0	0	1	0	2	14	14	0		Guna
1·2	+0·4	2·1	0	−0·59	0	...	0	−1·2	8·5	+0·2	2	2	0	0	0	9	15	2	1	3	4	0	0	1	11	11	1	0		Neemuch
2·3	...	2·5	0	...	0	...	0	...	7·6	...	0	2	0	0	7	13	8	1	0	0	0	0	0	0	6	21	4	0		Ratlam
1·8	+0·8	2·5	0·31	−0·20	0·26	18	1	−0·3	10·6	−0·9	1	0	0	0	0	0	26	4	0	1	1	0	1	0	3	18	7	0		Indore
1·9	+1·0	2·9	0·29	−0·28	0·21	19	1	−0·2	6·9	+1·4	0	0	0	1	0	3	14	13	0	1	0	1	0	0	7	12	9	1		Bhopal
2·3	+1·4	3·4	0·48	−0·09	0·44	20	1	−0·2	9·2 (b)	+0·7	9	0	0	1	0	0	3	18	0	5	2	0	1	0	1	9	13	0		Bairagarh
0·8	...	2·7	0·20	...	0·09	21	0	...	5·7	...	3	3	1	0	5	6	6	4	3	2	2	1	0	1	1	10	12	2		Madhosagar
																														Vindhya Pradesh
1·6	−0·3	2·5	0·16	−0·21	0·11	19	1	0	3·5	+0·7	4	2	1	0	0	13	7	3	1	12	1	0	0	0	3	12	3	0		Nowgong
1·2	−0·4	2·6	0	−0·47	0	...	0	−1·3	3·9	−0·6	3	0	3	2	5	4	2	3	9	9	2	0	1	0	0	9	9	1		Sutna
2·2	+0·2	2·9	0·03	−0·40	0·03	31	0	−0·7	3·5	0	2	1	3	2	0	4	6	6	7	4	7	0	0	0	0	3	13	4		Umaria
																														Madhya Pradesh East
2·0	...	2·5	0	...	0	...	0	...	3·2	...	7	9	1	2	5	5	3	5	1	4	3	0	0	1	1	2	7	13		Gondia
1·3	−0·6	3·5	0·53	−0·31	0·40	21	2	−0·1	4·6	−0·2	4	1	0	0	14	0	2	9	1	5	1	0	1	6	2	3	11	2		Pendra
2·1	...	3·7	0	...	0	...	0	...	5·0	...	1	2	8	7	0	4	5	2	2	5	0	2	1	0	2	13	7	1		Champa
3·6	+1·5	3·9	0	−0·89	0	...	0	−2·1	5·5	−1·6	1	1	1	2	5	6	9	3	3	8	2	0	0	0	2	6	8	5		Raipur
2·4	−0·7	3·8	0·24	−1·25	0·22	22	1	−1·7	4·6	+0·1	0	0	0	0	2	6	3	0	20	6	2	2	0	3	5	2	1	10		Kanker
2·6	+0·6	4·6	0·07	−0·54	0·07	22	0	−1·4	3·8	−0·2	0	1	0	2	0	6	0	17	5	4	2	0	1	0	4	0	6	14		Chanda
3·9	+1·2	6·3	0·86	−1·50	0·46	6	2	−2·8	5·3	+1·6	0	2	0	4	1	21	1	1	1	0	12	0	7	0	8	1	2	1		Jagdalpur
																														Madhya Pradesh West
3·8	...	3·7	0·96	...	0·46	5	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		Buldhana
2·9	+1·1	3·6	0·13	−0·28	0·13	20	1	0	9·0	+1·7	1	0	0	0	0	0	7	23	0	3	3	1	0	0	0	9	15	0		Akola
2·4	+0·8	4·0	0·20	−0·32	0·14	30	1	−0·3	7·9	+2·1	0	24	0	0	0	3	0	4	0	0	4	0	1	0	3	0	23	0		Amravati
3·0	...	4·5	0·06	...	0·06	31	0	...	10·5	...	9	0	0	0	1	5	3	13	0	11	3	0	0	2	4	2	8	1		Yeotmal
2·7	+1·6	4·0	0	−0·31	0	...	0	−0·7	9·1	+1·1	0	0	0	0	0	2	19	10	0	3	1	0	0	0	4	11	12	0		Khandwa
2·0	+0·8	2·7	0·26	−0·23	0·09	30	0	−1·2	3·7	+0·5	0	0	0	0	3	10	7	1	10	0	3	0	2	1	3	9	1	12		Hoshangabad
2·7	+1·3	3·6	0·04	−0·38	0·04	23	0	−1·1	11·5	0	1	3	1	2	1	3	13	7	1	1	3	0	1	0	1	10	15	0		Sagar
1·6	+0·4	3·2	0·21	−0·41	0·11	19	2	+0·6	4·1	+1·1	0	1	0	3	1	8	10	0	8	2	3	0	2	0	7	7	8	2		Jabalpur
1·8	+0·2	3·9	0·44	−0·32	0·25	24	2	+0·3	4·3	+0·5	8	1	0	0	2	4	0	8	8	6	3	2	0	1	4	6	9	0		Seoni

(b) Mean of 29 days. (d) Mean of 27 days.

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Re hur
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Madhya Pradesh West (Contd.)																				
Chhindwara ...	2,248	929·6	...	926·2	102·7	...	107	29,30	78·0	...	71	5	89·8	99·5	66·6	68·3	12·9	...	11·0	28
Betul ...	2,144	934·0	...	929·8	102·1	...	107	28,29	75·5	...	67	2	86·9	99·1	66·3	68·1	13·7	...	11·9	32
Nagpur ...	1,010	969·6	-1·3	965·2	109·4	+0·7	113	15,30	83·0	+2·1	76	8	93·8	103·3	71·6	73·1	17·2	+0·2	15·4	31
Gujarat																				
Deesa* ...	466	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Surat ...	39	1006·1	-0·5	1002·2	97·6	+0·3	107	6	79·0	+0·1	74	12	86·6	92·3	78·3	80·3	29·3	+1·2	29·9	67
Ahmedabad ...	163	1000·9	-1·8	996·2	104·3	-2·5	108	15	80·2	+1·0	76	1	84·8	102·4	75·1	74·9	25·3	0	17·1	62
Dohad ...	1,093	968·7	...	965·2	103·2	+0·2	107	28	78·7	0	75	1	84·2	100·7	72·2	72·3	21·6	-2·4	14·1	54
Baroda ...	115	1002·7	...	997·9	105·5	+0·9	111	28	79·0	+1·3	72	6	85·3	102·8	76·5	75·6	27·2	+1·6	17·9	66
Saurashtra & Kutch																				
Bhuj ...	343	994·0	-0·5	991·2	101·0	+0·1	108	14	77·4	+0·6	71	10,14	84·0	96·7	73·9	74·5	24·0	-2·5	19·1	61
Dwarka ...	37	1005·4	-0·6	1003·2	87·6	-0·4	89	5 days	80·3	-0·3	77	2	82·4	85·4	78·5	79·9	31·5	+0·4	32·4	83
Jamnagar ...	60	1005·5	+0·7	...	97·0	-0·5	106	16	77·7	+1·0	73	1	84·1	...	79·4	...	32·2	+3·2	...	75
Rajkot ...	432	991·3	-1·0	988·0	104·7	-0·2	109	15,16	76·6	+1·4	73	5 days	81·8	100·9	76·9	80·3	29·3	+2·8	25·9	79
Veraval ...	26	1006·4	-0·9	1003·8	87·8	...	95	7	77·7	...	71	1,7	81·6	85·0	77·9	79·8	31·0	...	32·4	85
Bhavnagar ...	55	1005·0	-0·7	1000·3	104·7	-0·5	110	6,12,28	78·8	+0·7	74	5,7,8	84·1	100·8	73·8	79·4	23·8	-1·6	24·6	60
Konkan																				
Dahanu ...	15	1006·9	...	1004·1	90·0	...	95	6	79·0	...	75	4 days	85·5	89·5	77·8	79·9	29·0	...	30·4	69
Bombay ...	35	1006·8	-0·9	1003·9	92·3	+1·2	96	6	80·1	+0·5	76	1	86·0	88·6	78·5	79·7	29·9	+0·4	30·7	70
Alibag ...	23	1007·8	0	. .	89·5	+0·6	93	6	79·3	+0·2	75	1,2,3	84·4	...	78·9	...	31·2	+2·0	...	77
Harnai ...	66	1005·4	...	1003·3	87·7	...	90	21,22,23	77·0	...	68	15	84·1	85·5	80·5	81·5	33·9	...	34·9	83
Devgad ...	117	1004·1	...	1001·5	91·2	...	94	7,8	80·9	...	73	28,29	83·7	88·1	78·4	80·2	30·8	...	31·6	78
Vengurla ...	29	1007·3	...	1004·4	90·9	...	93	9	80·5	...	75	5 days	85·6	87·6	77·8	78·6	29·0	...	29·3	69
Marmagao ...	202	1001·4	-0·7	998·6	88·9	+0·6	91	8	80·8	+0·4	73	6	84·4	86·5	77·6	78·2	29·2	-0·4	29·1	72
Honavar ...	85	1006·5	...	1003·8	91·2	...	95	21	79·3	...	74	28	83·9	87·2	77·7	79·2	29·6	...	30·4	75
Deccan (Desh)																				
Jalgaon ...	660	983·1	...	979·1	108·8	...	115	28	81·1	...	77	1,22	86·5	106·6	75·3	79·6	24·9	...	22·2	59
Malegaon ...	1,432	958·0	-1·1	953·4	105·2	+0·2	110	14	75·5	+0·4	71	2,3	88·3	101·3	70·8	73·8	17·8	-2·4	16·0	40
Deolali ...	1,874	944·3	...	...	98·0	...	103	8	72·2	...	65	8	81·5	...	68·4	...	18·4	...	...	52
Ahmednagar ...	2,154	935·2	-0·6	930·3	103·2	+0·3	106	4 days	72·1	0	66	16	82·5	97·4	67·0	69·2	16·3	-1·7	12·9	45
Poona ...	1,834	945·8	-1·0	942·1	98·3	-0·5	106	6	71·7	-0·7	65	3	80·4	92·7	69·0	71·5	19·5	-1·0	17·7	55
Sholapur ...	1,570	954·0	-0·7	948·9	105·1	+0·4	109	4,5,15	77·8	+0·8	71	30	84·6	101·2	69·9	72·9	19·0	+0·1	16·1	48
Miraj ...	1,817	946·5	-0·6	942·2	99·3	+0·1	105	6 days	71·8	-0·7	67	28	78·1	93·6	70·8	72·9	22·8	-1·3	19·1	70
Kolhapur ...	1,885	944·7	...	941·0	96·4	...	105	12	71·4	...	67	28	77·8	89·3	70·3	72·3	22·2	...	20·2	69
Bijapur ...	1,950	941·6	-1·0	937·1	101·1	-0·5	107	15	74·4	-0·1	69	30	80·9	97·5	70·2	71·7	20·9	-0·3	16·1	58
Belgaum ...	2,562	923·1	-0·4	919·9	92·3	-0·9	99	10,12	68·4	0	62	4	74·7	86·1	69·0	74·4	21·9	0	24·3	75
Gadag ...	2,131	936·8	-0·1	932·1	98·0	-0·3	105	12	72·1	-0·5	68	28	78·2	93·6	74·0	78·1	27·0	+2·9	26·5	81
Hyderabad, North																				
Aurangabad ...	1,905	943·3	-0·7	938·5	104·1	+0·6	109	17	76·3	+0·5	72	2	83·9	100·5	69·3	76·0	18·5	+1·2	20·6	49
Parbhani ...	1,350	959·0	...	954·2	106·9	...	112	15	79·8	...	75	25	87·7	103·4	71·6	75·8	19·2	...	17·9	43
Ramagundam ...	527	986·6	...	981·7	110·9	..	114	19	84·3	...	75	28	90·3	104·1	74·0	74·2	21·3	...	15·3	45
Nizamabad ...	1,250	962·5	-1·6	958·1	106·8	+0·2	110	4 days	81·5	+0·1	76	9	88·0	103·6	70·4	74·3	17·5	-2·0	15·7	39
Bidar ...	2,178	933·1	...	928·9	101·8	-0·4	106	15	79·1	+0·9	74	25,30	85·0	97·4	68·8	69·3	17·5	-1·4	13·0	44

* Data not reliable.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																				STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.										
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
4	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																															Madhya Pradesh West *(Contd.)*
3·0	...	3·4	0·04	...	0·04	19	0	...	5·6	...	4	2	1	0	1	2	8	12	1	6	3	0	0	2	1	9	10	0	Chhindwara
3·3	...	3·5	0·05	...	0·04	21	0	...	4·9	...	1	0	0	0	0	2	14	14	0	4	2	0	0	2	1	10	12	0	Betul
3·0	+0·9	5·0	0·33	−0·43	0·30	24	1	−1·0	6·3	...	4	0	2	2	4	4	2	13	0	3	6	3	2	1	1	8	7	0	Nagpur
																															Gujarat
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Deesa *
2·7	−0·3	1·7	0	−0·24	0	...	0	−0·3	7·8	+1·2	0	0	0	1	2	23	0	4	1	0	0	0	0	3	24	0	4	0	Surat
1·4	−0·2	0·7	0	−0·39	0	...	0	−0·7	5·0	+0·1	2	0	0	0	1	12	10	6	0	1	0	0	0	4	12	10	3	1	Ahmedabad
2·2	+0·8	0·7	0	−0·66	0	...	0	−0·5	17·5	+9·0	0	0	0	0	0	13	16	2	0	0	0	0	0	0	22	7	2	0	Dohad
1·3	−0·1	0·6	0	−0·20	0	...	0	−0·5	5·3	−0·5	0	0	0	0	4	12	6	3	6	1	0	0	0	4	12	8	6	0	Baroda
																															Saurashtra & Kutch
0·7	−0·3	0·5	0	−0·26	0	...	0	−0·3	9·8	−1·1	0	0	0	0	0	14	14	3	0	1	0	0	0	0	13	16	1	0	Bhuj
2·1	−0·2	1·4	0	−0·02	0	...	0	−0·1	12·6	+1·2	0	0	0	0	2	9	16	4	0	0	0	0	0	1	10	19	1	0	Dwarka
0	−1·8	...	0	−0·30	0	...	0	−0·3	11·0	−3·8	0	0	0	0	0	15	14	1	1	...	...	...	...	...	..	...	...	...	Jamnagar
2·2	0	1·4	0	−0·50	0	...	0	−0·6	14·7	+3·4	0	0	0	0	1	11	13	6	0	0	0	0	0	1	8	7	15	0	Rajkot
3·2	+0·8	1·8	0	−0·28	0	...	0	−0·3	13·0	...	2	0	0	0	3	4	8	11	3	0	0	0	0	1	6	20	4	0	Veraval
1·1	−0·7	1·5	0	−0·41	0	...	0	−0·7	7·7	+0·5	1	0	0	0	5	10	11	3	1	1	0	2	4	15	5	2	2	0	Bhavnagar
																															Konkan
4·6	...	2·8	0	...	0	...	0	...	10·8	...	0	0	7	8	1	4	10	1	0	0	0	0	1	0	10	19	1	0	Dahanu
3·5	+0·2	2·5	0·13	−0·52	0·07	29	0	−0·8	4·9	−1·8	5	1	0	1	2	4	6	4	8	1	0	0	0	0	0	18	12	0	Bombay
3·2	−0·3	...	0·01	−1·03	0·01	27	0	−0·8	7·3	−1·0	2	0	1	5	3	3	3	7	7	...	...	...	...	...	...	...	...	...	Alibag
2·6	..	2·0	0·19	...	0·19	27	1	...	9·8	...	0	1	5	6	0	4	2	13	0	1	0	0	0	0	12	9	9	0	Harnai
3·5	...	3·0	1·08	...	0·68	29	2	...	10·8	...	0	9	5	1	1	0	7	8	0	0	0	0	0	0	0	20	11	0	Devgad
4·3	...	3·0	1·75	...	1·17	29	3	...	...	...	4	0	1	0	0	0	0	4	22	0	0	0	0	0	2	23	2	4	Vengurla
3·9	−0·4	3·3	1·89	−1·35	0·79	30	4	+2	9·0	+1·8	4	5	3	1	0	0	10	8	0	0	0	0	0	0	1	19	11	0	Marmagao
4·8	...	4·7	4·12	+0·70	2·70	30	5	+1·1	3·5	...	1	1	7	3	0	1	4	3	11	0	0	0	0	0	3	19	9	0	Honavar
																															Deccan (Desh)
2·1	...	2·3	0·10	−0·31	0·08	22	0	−0·9	11·4	...	0	0	0	0	0	1	18	12	0	1	2	0	0	0	2	6	20	0	Jalgaon
1·3	−0·1	2·5	0·04	−0·69	0·04	26	0	−1·2	7·2	−1·5	0	0	0	2	0	1	16	9	3	2	0	0	0	0	2	11	16	0	Malegaon
2·1	...	...	0·31	...	0·31	26	1	...	9·3	...	1	0	0	0	1	13	11	4	1	...	...	...	...	...	...	...	...	...	Deolali
1·7	+0·3	3·7	0·44	−0·47	0·35	24	1	−0·6	6·0	−1·8	3	0	0	0	0	0	2	20	6	3	2	0	1	0	3	6	15	1	Ahmednagar
2·4	+0·4	2·8	1·84	+0·78	1·67	28	2	+0·3	3·8	−5·3	0	1	0	0	0	2	14	4	10	2	0	1	0	0	0	19	9	0	Poona
2·1	−0·1	4·6	0·18	−0·71	0·12	26	1	−0·9	7·7	−0·5	4	4	2	0	0	6	4	9	2	11	0	0	0	1	3	11	5	0	Sholapur
2·3	−0·4	3·9	2·12	+0·23	0·69	28	4	+1·1	9·9	+1·8	3	0	0	1	0	5	15	7	0	2	0	1	1	2	4	18	3	0	Miraj
2·1	...	2·5	2·64	...	1·44	28	6	...	10·4	...	0	0	0	0	0	3	25	2	1	0	0	1	0	0	0	28	2	0	Kolhapur
2·6	+0·2	4·5	2·04	+0·92	1·35	30	4	+1·8	7·0	+0·3	4	0	0	0	0	7	9	10	1	5	4	1	1	1	2	4	11	2	Bijapur
3·3	+0·1	1·3	1·89	−0·41	1·15	6	3	−1·3	5·6	+0·9	0	1	0	0	9	6	10	4	1	1	0	1	1	5	7	12	4	0	Belgaum
4·3	+1·3	5·4	2·51	+0·42	0·96	27	3	−1·1	10·0	+1·5	0	0	0	0	0	13	16	2	0	1	1	3	3	0	7	10	4	2	Gadag
																															Hyderabad North,
3·4	+1·7	5·2	0·22	−0·50	0·08	26	0	−1·3	10·9	+1·0	3	1	0	0	0	7	13	5	2	3	3	0	1	0	5	10	9	0	Aurangabad
2·9	...	3·9	1·06	+0·30	0·97	25	1	−0·4	...	...	0	0	0	0	0	0	30	0	1	5	0	1	0	0	0	25	0	0	Parbhani
2·3	...	3·9	0	...	0	...	0	...	5·3	...	1	0	0	5	16	3	5	1	0	8	2	1	3	11	1	2	2	1	Ramagundam
2·4	+0·2	3·3	0·61	−0·07	0·48	22	2	+0·6	4·2	−0·1	1	1	0	0	0	6	3	10	10	2	1	0	0	0	4	1	7	16	Nizamabad
2·9	+0·5	5·1	0·40	−0·52	0·14	12,25	3	+0·6	8·9	+1·0	2	2	0	0	1	4	7	15	0	3	8	2	2	1	2	4	9	0	Bidar

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relat humi %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Hyderabad, South																					
Gulbarga ...	1,503	955·3	-1·2	950·2	104·3	-0·6	109	12,13	78·7	+0·1	70	30	84·9	99·6	69·8	70·8	18·7	-1·9	14·0	48	-3
Raichur ...	1,311	962·3	-0·8	957·1	104·3	+0·6	110	4	80·6	+1·5	73	27	84·6	100·3	74·0	76·1	23·9	+0·5	20·3	59	+3
Hyderabad (Begumpet) ...	1,778	945·9	-0·8	941·8	103·8	+0·7	108	2,4	80·1	+0·4	71	30	86·1	97·9	71·8	72·5	20·8	+1·3	16·9	50	0
Hanamkonda ...	881	974·9	-1·2	970·0	106·5	+2·0	110	5 days	82·9	+1·2	76	9	88·6	103·4	74·3	72·5	22·5	+0·9	13·2	50	+3
Khammameth ...	367	992·5	...	987·3	106·1	...	111	17	82·0	...	72	4,27	88·1	103·1	79·1	78·5	29·9	...	22·1	67	...
Coastal Andhradesa																					
Nellore ...	66	1002·8	-1·1	998·8	103·9	-0·3	113	18	82·2	+0·4	74	27	90·6	94·0	78·7	80·3	28·2	-0·3	29·1	59	-1
Ongole ...	38	1003·6	...	999·3	100·6	...	112	18	81·7	...	74	4	88·6	92·9	78·9	80·6	29·3	...	31·3	66	...
Masulipatam ...	10	1004·6	-1·2	1000·8	96·3	-3·2	108	24	82·3	+0·6	73	27,28	88·0	89·5	81·9	83·0	34·4	+0·7	35·6	78	+6
Kakinada ...	26	1004·1	-1·3	1000·3	99·7	+0·5	106	25	81·4	-0·3	73	14,16	88·9	91·9	81·0	82·0	32·6	+0·1	32·9	70	-1
Visakhapatnam ...	126	1000·5	-1·0	997·3	91·7	-0·3	101	16	82·3	+0·9	75	14	87·0	86·8	78·9	79·5	30·0	-1·0	31·1	69	0
Calingapatam ...	19	1004·0	-0·9	1000·6	91·6	-2·7	97	15,23	82·0	+1·3	76	12	85·4	87·5	80·8	82·0	33·5	+0·8	34·8	81	+9
Rentachintala ...	348	993·4	...	988·2	107·5	+0·6	113	2,17	83·3	-0·9	71	27	91·1	102·5	75·6	74·6	23·4	-2·5	16·6	48	-5
Rayalaseema																					
Cuddapah ...	428	991·9	-0·9	986·6	104·2	-1·4	110	2,14,15	84·9	+1·7	71	27	89·5	100·7	79·1	81·3	26·1	0	27·7	56	+2
Bellary ...	1,473	957·0	-1·1	952·3	100·3	-1·8	106	12	79·0	+1·3	71	27	82·9	97·1	71·9	73·6	21·7	-0·1	17·4	57	+2
Kurnool ...	923	975·1	-0·9	969·6	103·4	-1·1	109	2,15	80·3	-0·7	69	27	85·3	101·0	73·0	73·4	22·2	-1·6	15·6	54	-1
Anantapur ...	1,147	967·8	...	962·6	101·2	...	107	4 days	79·2	...	70	27	83·8	98·5	73·4	74·8	23·3	...	18·8	60	...
Tamilnad																					
Pamban ...	37	1005·7	-1·0	1002·7	91·5	-0·2	94	7,23	83·1	+2·0	77	27	86·7	86·6	79·6	80·1	31·3	-1·4	32·2	72	-6
Mathurai ...	437	992·0	-1·1	988·1	101·6	+2·8	106	24	80·3	+2·3	74	18	88·0	95·9	75·4	75·6	24·3	-1·8	21·0	55	-8
Nagapattinam ...	31	1005·8	-0·8	1002·0	96·7	-0·6	105	18,19	81·1	+0·4	72	26	86·8	88·9	78·7	81·0	29·8	-0·3	32·6	67	-3
Tiruchi ..	295	996·8	-1·3	992·1	101·4	+0·9	105	7 days	80·3	+1·1	74	26	86·2	97·4	76·7	76·1	27·1	-0·5	21·1	63	-3
Coimbatore ...	1,341	962·4	-0·7	958·5	94·9	+0·5	101	9	75·6	+2·0	71	29	81·1	89·2	73·8	73·9	25·2	-2·2	21·7	68	-10
Salem ...	913	976·2	-1·0	971·2	100·6	+1·3	106	18	79·5	+2·5	75	15,25,27	83·7	95·2	79·0	84·6	31·8	+4·0	35·8	81	+10
Kallakurichi ...	416	991·9	...	987·4	102·3	...	109	18	79·6	...	69	2	86·3	96·3	75·7	75·5	25·6	...	20·7	60	...
Cuddalore ...	39	1005·3	-0·7	1000·9	97·5	-0·3	108	19,24	81·3	+0·9	70	26	87·7	89·0	77·4	80·3	27·9	-2·4	31·8	63	-4
Vellore ...	703	982·5	-0·2	978·1	102·3	+0·5	109	14,18	81·1	+2·1	77	4 days	87·1	95·8	74·2	73·4	23·0	-3·9	17·9	54	-6
Madras ...	51	1004·0	-1·0	1000·3	100·2	-1·1	109	18	81·8	+0·1	71	26,27	88·4	91·0	77·6	79·1	27·4	-0·8	28·6	61	+1
Arogyavaram ...	2,299	930·4	...	926·6	95·9	...	101	4 days	76·7	...	67	27	81·9	91·5	69·6	69·3	19·1	...	15·5	54	...
Malabar And South Kanara																					
Mangalore ...	72	1006·5	-0·6	1003·6	90·2	-0·6	93	7	79·8	+1·0	70	8	83·7	86·2	77·2	77·7	29·0	-0·4	28·5	74	0
Kozhikode ...	27	1007·3	-0·6	1005·1	91·9	+1·8	95	14,17	79·8	+1·6	73	29	83·7	87·5	77·8	80·5	29·9	-0·5	32·3	76	-1
Palghat ...	319	997·8	...	994·2	95·4	...	102	9	78·7	...	74	30	82·9	88·5	77·2	76·6	29·3	...	25·8	76	...
Mysore																					
Chitaldrug ...	2,405	927·4	-0·9	923·3	94·7	-0·4	100	6,7,12	71·7	-0·2	65	27	76·0	92·3	69·9	69·9	23·5	-0·4	15·8	74	+1
Hassan ...	3,149	904·6	...	901·4	90·8	+1·4	98	12	68·5	+0·9	66	10,23,30	72·5	82·9	68·7	71·8	22·3	+0·1	21·6	82	+1
Bangalore ...	3,021	908·2	-0·5	904·3	92·2	+1·0	98	2,10	71·2	+3·3	65	4,27,31	75·5	87·2	68·3	67·6	20·7	-1·7	15·2	69	-1
Mysore ...	2,518	924·6	-0·6	920·7	92·3	+0·4	99	3	70·1	+0·2	65	11,13,14	75·4	87·9	70·2	71·2	23·1	-0·1	19·3	77	+1

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.									1730 hrs. I.S.T.								
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
4	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Hyderabad South,
1·2	+1·1	4·5	1·68	+0·56	0·57	31	4	+1·6	9·9	+1·6	0	1	3	1	0	5	12	9	0	1	4	6	0	0	4	6	10	0	Gulbarga
1·8	+1·5	4·6	0·16	−0·91	0·16	27	1	−1·3	9·8	+1·6	0	1	1	0	0	7	11	11	0	1	7	3	2	1	3	7	6	1	Raichur
1·7	+0·7	5·0	1·72	+0·63	0·92	30	3	+0·7	7·9	+1·5	3	1	1	1	0	2	7	12	4	5	3	1	3	0	4	2	10	3	Hyderabad (Begumpet)
1·7	+0·7	4·1	0·12	−1·10	0·11	26	1	−1·0	7·3	+1·0	2	0	0	6	10	3	3	5	2	7	5	2	1	3	2	2	7	2	Hanamkonda
1·9	...	4·4	2·84	...	1·50	4	5	...	5·8	...	2	0	1	12	4	6	2	2	2	8	1	7	3	2	5	2	2	1	Khammameth
																													Coastal Andhra desa
3·9	+0·1	3·6	1·37	+0·28	1·05	27	3	+1·6	6·0	+0·4	0	0	0	2	9	0	7	6	7	0	0	5	16	1	0	3	2	4	Nellore
4·1	...	5·0	2·60	...	1·15	4	5	...	6·7	...	0	0	0	7	3	2	10	1	8	1	0	2	19	1	1	2	4	1	Ongole
4·4	+0·7	2·8	2·78	+1·46	1·11	27	4	+2·0	9·0	+2·4	1	0	0	9	8	2	6	4	1	1	0	0	13	14	0	1	2	0	Masulipatam
3·0	−1·4	2·5	1·00	−0·54	0·75	22	2	−0·5	7·2	+1·5	0	2	0	2	0	20	1	3	3	0	3	0	15	1	11	0	1	0	Kakinada
3·8	−0·9	4·8	2·25	+0·25	1·40	25	3	+0·3	6·8	+1·2	1	2	2	0	3	13	9	1	0	0	2	2	0	6	17	4	0	0	Visakhapatnam
4·9	+1·4	5·3	2·29	−0·27	0·96	29	5	+1·8	13·6	+3·0	0	1	1	1	3	14	11	0	0	0	1	2	1	13	13	1	0	0	Calingapatam
5·1	+0·9	5·6	1·02	−1·50	0·58	27	2	−0·8	6·5	−1·4	0	0	3	1	3	4	14	4	2	6	2	5	2	2	2	8	2	2	Rentachintala
																													Rayalaseema
3·8	+0·8	4·2	2·09	+0·58	1·80	27	3	+0·4	5·2	−0·9	2	0	1	0	1	0	16	3	8	1	1	4	0	0	0	4	1	20	Cuddapah
5·7	+2·3	5·5	0·93	−0·96	0·16	29	2	−1·3	7·3	+1·3	1	3	1	1	0	2	1	12	10	3	2	2	0	1	2	3	15	3	Bellary
2·7	−0·4	2·2	2·30	+1·22	1·16	27	6	+3·5	7·5	+0·7	1	0	0	0	1	7	10	9	3	5	4	0	1	0	3	4	6	8	Kurnool
4·1	...	4·4	3·14	+1·10	2·11	27	3	−0·7	10·1	...	0	0	0	0	1	8	20	2	0	2	6	1	2	0	2	4	13	1	Anantapur
																													Tamilnad
3·4	+0·7	5·1	0·40	−0·57	0·35	27	1	−0·7	11·0	+0·9	0	0	0	2	11	16	2	0	0	0	0	0	7	17	6	1	0	0	Pamban
4·1	−0·2	5·7	2·38	−0·36	1·70	18	2	−2·7	4·6	+0·3	2	2	0	0	0	3	8	12	4	1	0	3	7	2	2	7	4	5	Mathurai
5·7	+1·9	3·9	4·23	+2·66	1·93	26	5	+3·2	7·4	+1·0	0	0	0	2	6	14	8	0	1	0	0	0	16	6	5	2	1	1	Nagapattinam
4·5	+1·1	5·0	2·61	−0·70	0·87	16	5	+0·9	9·5	−0·1	0	0	0	0	0	1	16	12	2	0	3	4	3	3	3	6	8	1	Tiruchi
3·2	−0·2	4·0	0·71	−1·76	0·24	13	2	−2·5	8·0	+4·2	4	5	1	2	9	9	1	0	0	2	3	2	3	9	9	3	0	0	Coimbatore
4·0	+0·6	6·0	1·16	−3·44	0·62	25	3	−4·1	5·5	+1·9	0	0	0	0	3	16	9	2	1	3	1	1	1	7	4	9	2	3	Salem
6·3	...	6·3	3·37	...	1·10	2	7	...	...	...	1	4	0	6	2	4	0	0	14	0	4	0	9	0	0	3	4	11	Kallakurichi
4·0	+0·7	3·6	3·80	+2·80	2·43	26	7	+5·7	9·1	+2·8	0	0	0	6	4	16	1	2	2	1	0	9	15	0	1	0	1	4	Cuddalore
3·2	+0·6	5·9	0·94	−1·35	0·59	27	3	−0·8	5·2	+1·4	0	1	1	0	0	1	13	11	4	3	3	5	1	7	2	2	7	1	Vellore
4·1	+0·7	4·4	2·30	+1·27	1·79	26	4	+2·9	10·3	−1·5	0	0	0	4	12	8	6	1	0	0	1	0	24	3	2	1	0	0	Madras
6·0	...	5·4	1·47	...	1·31	27	1	...	7·2	...	1	0	0	0	3	1	13	12	1	6	3	4	1	1	1	4	12	0	Arogyavaram
																													Malabar And South Kanara
5·3	+0·4	4·5	4·41	−1·77	1·66	29	7	+0·3	5·9	+0·4	9	4	3	2	1	0	0	10	2	2	1	0	0	0	4	5	19	0	Mangalore
5·6	+0·6	5·8	13·63	+4·35	6·58	29	6	−2·7	9·8	+2·8	5	8	4	0	0	0	5	9	0	0	1	1	0	1	2	13	13	0	Kozhikode
4·2	...	4·7	4·02	...	2·50	29	5	...	8·2	...	0	0	0	0	0	1	29	1	0	0	0	0	0	0	6	24	1	0	Palghat
																													Mysore
4·5	+0·3	4·5	3·32	+0·38	1·18	27	6	+1·6	7·9	+1·8	0	1	0	0	0	6	22	1	1	1	0	2	0	0	2	13	8	5	Chitaldrug
5·1	+1·3	6·3	1·36	−3·36	0·34	27	6	−1·2	8·7	+3·4	1	0	1	0	0	2	22	4	1	0	2	0	1	0	6	20	2	0	Hassan
4·2	+0·3	5·7	3·94	−8·22	1·58	31	7	+0·4	8·2	+2·7	1	1	0	0	0	3	16	8	2	6	1	3	1	2	1	4	10	3	Bangalore
4·1	−0·5	5·8	9·10	+3·51	2·10	11	7	−0·9	6·4	+0·3	0	1	0	0	3	2	22	2	1	1	0	2	1	2	5	16	2	2	Mysore

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relat humi %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Travancore-Cochin																					
Fort Cochin ...	10	1008·7	−0·7	1006·1	88·0	+0·5	91	15	79·7	+1·5	73	29	83·5	85·7	78·6	79·3	31·2	+0·7	31·3	80	0
Alleppey ...	12	1008·6	...	1005·8	91·1	...	94	7,20	79·5	...	73	12,28,29	84·4	86·3	79·4	79·9	32·0	...	32·4	79	..
Trivandrum ...	211	1001·9	−0·3	999·3	89·7	...	93	1,10	78·2	...	73	4	82·2	85·1	77·6	78·0	30·2	−0·3	29·5	81	(
Nagercoil ...	195	1001·5	...	998·8	93·2	...	97	1,6,9	79·4	...	72	29	83·8	85·2	76·9	76·8	28·5	...	27·7	72	..
Hill Stations Excluding Kashmir																					
Aijal ...	3,599	888·1	...	885·6	77·9	...	85	10	66·3	...	60	7	72·8	75·1	69·1	71·8	22·9	...	24·9	84	..
Shillong ...	4,921	848·1	+0·2	845·1	75·6	+1·6	81	4	60·0	+0·9	55	10	69·8	68·8	62·9	64·5	16·7	−0·1	18·8	68	0
Cherrapunji ...	4,309	867·3	+0·4	864·2	72·8	+0·7	78	11	61·8	+0·8	55	1	67·8	69·6	64·3	66·4	19·2	+0·2	21·1	84	+
Darjiling ...	7,432	773·9	−1·3	771·6	64·9	+2·0	70	25	53·0	+0·6	48	9,29	59·2	58·3	57·1	56·9	15·2	+0·9	15·2	89	+
Kalimpong ...	3,965	876·6	−0·3	874·1	75·2	+0·6	81	25	62·4	−0·3	57	2,4	67·3	71·1	63·8	66·5	18·8	−0·5	20·5	83	+
Katmandu ...	4,388	864·7	...	861·5	85·5	+0·2	93	4	59·7	−0·7	53	2	72·1	76·0	64·0	65·2	17·2	−0·6	16·6	64	−
Muktesar ...	7,592	771·1	−0·6	769·3	74·7	+1·6	79	27,29	56·9	+1·1	49	15,19,20	62·8	68·6	51·4	54·4	9·1	+0·3	9·5	47	+
Mussooree ...	6,699	795·2	...	794·2	76·6	+0·1	82	5.7	60·6	+2·0	48	31	69·5	73·2	59·5	57·8	13·8	+3·9	10·9	47	+
Simla ...	7,224	780·4	−0·2	779·3	75·0	+1·8	80	28	58·5	+0·8	48	31	68·1	71·3	52·3	54·5	7·7	−0·6	8·4	34	−
Abu ...	3,945	877·9	−0·5	875·9	89·3	+1·4	94	18,29	72·5	+1·4	66	24	79·2	84·1	60·8	64·7	10·7	−1·0	13·0	34	−
Pachmarhi ...	3,528	890·5	−1·1	887·6	97·4	+1·6	102	29	75·3	+0·2	69	3	85·2	94·0	63·9	66·0	11·8	−1·8	10·5	29	−
Mahabaleshwar ...	4,534	861·5	−0·5	859·7	83·7	−0·7	91	6.12	65·6	+0·8	61	19	71·6	75·4	63·9	69·7	17·2	+3·3	22·5	66	+1
Mercara ...	3,781	884·3	−0·7	882·7	80·5	+0·4	86	9	64·9	+0·4	61	10	69·5	76·2	66·5	70·1	21·0	+0·3	22·7	86	+
Kodaikanal ...	7,688	771·1	+0·2	769·3	69·7	+1·3	74	2	55·1	+0·4	50	10	61·8	60·6	53·9	56·8	11·4	−1·2	14·4	61	−
Ootacamund ...	7,364	779·9	0	777·8	72·2	+1·8	79	1	52·2	−0·3	48	24	62·1	64·0	55·4	58·0	12·6	0	14·3	68	+
Coonoor ...	5,730	825·4	...	...	75·8	−0·5	81	17,19	58·8	−0·2	57	6 days	70·8	...	64·4	...	18·4	+3·7	...	71	+1
Tibet																					
Lhasa ...	12,090	622·3	...	...	68·2	...	78	23,26	41·8	...	32	3,4,6	54·2	...	53·1	...	13·4	...	...	94	.
Gyantse ...	13,110	624·7	...	...	65·5	+3·7	74	24,25	39·0	+4·0	31	6	53·3	...	40·0	...	4·2	−2·8	...	32	−1
Ceylon																					
Colombo ...	24	1008·5	−0·6	1005·9	87·9	+0·2	90	20	79·5	+1·9	74	26	83·2	84·1	78·7	78·8	31·5	+0·6	31·2	81	−
Trincomalee ...	24	1006·7	−0·1	1003·8	93·8	+0·6	98	3	78·3	0	71	17,19	83·5	87·1	78·0	79·1	30·2	+0·7	30·3	77	−
Hambantota ...	61	1006·2	−0·8	1003·6	88·8	+2·0	93	23,25	78·8	+1·5	74	28	82·5	83·4	78·0	70·4	30·7	+0·5	30·9	81	−
Mannar ...	12	1007·2	...	1004·4	90·2	...	92	6 days	82·0	...	72	22	85·8	85·8	80·3	80·3	32·9	...	32·9	77	.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																				STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.										
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Travancore-Cochin
7·2	+2·2	7·3	12·97	+1·29	5·12	28	7	-5·3	9·2	+3·9	3	11	7	2	1	0	2	3	2	0	0	0	0	1	4	15	11	0	Fort Cochin
b) 5·6	...	5·7	13·00	...	5·30	28	10	...	9·3	...	4	3	4	1	0	2	4	13	0	1	0	0	0	0	1	12	16	1	Alleppey
4·3	-1·1	5·9	7·14	-1·64	2·46	28	8	-2·1	7·0	+1·9	16	1	0	0	0	1	0	13	0	3	0	0	0	0	1	4	23	0	Trivandrum
5·0	...	5·8	4·66	...	1·32	27	6	...	11·3	...	1	0	0	0	0	1	20	9	0	0	0	0	0	0	1	24	6	0	Nagercoi
																													Hill Stations Excluding Kashmir
3·2	...	2·7	4·01	...	0·83	28	10	...	4·8	...	2	4	1	8	6	6	1	1	2	2	0	1	1	0	9	7	11	0	Aijal
5·5	+0·5	6·0	16·32	+5·03	3·19	29	22	+4·7	2·7	-1·0	0	0	0	1	1	8	1	0	20	0	0	0	0	1	6	0	0	24	Shillong
5·5	-0·3	4·2	41·93	-8·51	7·30	1	22	0	7·8	+2·3	1	5	1	2	3	16	2	0	1	0	2	1	0	1	19	6	1	1	Cherrapunji
6·3	+0·7	5·8	7·08	-2·55	1·29	20	13	-1·4	6·2	+1·4	0	1	10	2	0	6	11	0	1	1	0	1	1	0	7	16	1	4	Darjiling
5·7	+1·5	4·8	5·19	-1·08	2·37	14	10	-1·8	6·2	-0·6	0	0	0	3	1	0	3	17	7	0	0	0	20	2	1	0	7	1	Kalimpong
3·7	-0·8	4·8	4·73	-0·37	1·46	14	10	-0·5	1·0	-0·4	1	0	4	2	2	1	0	0	21	4	1	2	1	0	1	2	7	13	Katmandu
0·9	-1·1	2·2	2·11	-0·19	0·80	30	4	-1·1	10·9	-4·0	0	0	0	1	2	7	13	5	3	1	1	0	0	0	7	19	2	1	Muktesar
1·4	-0·8	2·5	0·99	-0·68	0·28	31	4	-0·3	...	...	5	7	2	5	7	2	0	1	2	3	3	0	3	12	7	0	0	3	Mussooree
1·4	-0·7	2·2	2·50	-0·03	1·08	31	4	-1·2	1·7	-2·1	1	2	2	3	7	3	1	0	12	2	2	0	0	10	11	3	2	1	Simla
0·6	-0·2	0·9	0	-0·93	0	...	0	-1·3	6·7	-0·6	1	0	0	2	5	5	4	4	10	0	0	0	6	12	8	4	1	0	Abu
1·8	-0·2	2·7	0·09	-0·53	0·05	30	0	-1·6	3·6	-1·7	2	1	0	0	0	1	8	18	1	1	4	0	0	0	0	9	15	2	Pachmarhi
3·5	+0·6	3·8	0·83	-0·77	0·27	27	4	+1·6	7·8	-0·7	3	4	0	1	0	4	1	18	0	0	1	0	0	0	6	3	21	0	Mahabaleshwar
4·9	-0·2	4·9	1·65	-3·56	0·60	10	5	-3·5	6·3	+2·5	3	3	0	0	1	2	11	11	0	1	0	0	0	2	3	13	12	0	Mercara
4·2	+0·6	6·7	5·65	-0·72	1·62	10	10	-0·6	9·0	+1·9	3	11	1	1	0	0	4	10	1	10	6	3	2	1	0	3	4	2	Kodaikanal
3·7	-0·2	5·5	3·14	-3·15	0·86	31	9	-3·0	1·2	-1·5	0	0	2	0	0	1	1	2	25	1	2	1	0	1	1	0	3	22	Ootacamund
4·5	+0·3	...	4·09	-0·08	1·27	4	8	+0·3	3·9	+0·6	6	0	1	9	7	2	3	3	0	...	...	...	...	...	...	...	...	...	Coonoor
																													Tibet
1·9	...	...	1·70	...	0·72	17	3	...	1·0	...	0	0	0	0	0	0	0	0	31	...	...	...	...	...	...	...	...	...	Lhasa
2·8	-0·5	...	0·08	-0·50	0·06	19	0	-2·2	4·5	+0·4	1	3	1	5	2	4	0	0	15	...	...	...	...	...	...	...	...	...	Gyantse
																													Ceylon
6·3	+0·4	6·9	9·73	-3·51	3·29	4	11	-3·1	...	...	0	0	0	2	1	16	9	1	2	0	0	1	1	2	18	9	0	0	Colombo
5·8	+2·4	6·8	6·96	+4·28	1·58	7	8	+4·6	..	..	0	1	0	0	1	28	1	0	0	1	0	3	4	1	19	1	1	1	Trincomalee
7·1	+3·2	6·6	2·02	-2·63	0·57	27	6	-0·8	...	...	0	0	0	0	0	19	12	0	0	0	0	0	0	2	20	9	0	0	Hambantota
5·5	...	5·8	1·58	...	0·67	27	3	...	...	...	0	0	0	0	7	23	1	0	0	0	0	0	1	8	21	1	0	0	Mannar

(b) Mean of 29 days

TABLE *III*.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 4TH CLASS STATIONS—MAY 1950

STATION	Maximum temperature, °F				Minimum temperature, °F				Mean dry bulb temperature 0830 hrs. I.S.T. °F	Mean wet bulb temperature 0830 hrs. I.S.T. °F	Vapour pressure millibars		Relative humidity %		Mean cloud amount, 0830 hrs. I.S.T.	Rainfall, inches				Number of rainy days (0·10″ or more)		Wi
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 0830 hrs. I.S.T.	Departure from normal	Mean 0830 hrs. I.S.T.	Departure from normal		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Resultant direction 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Assam																						
Lumding ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·38	−4·09	0·45	19	9	−1·7	...
Jammu and Kashmir																						
Jammu ...	102·7	+2·8	110	28	77·5	−0·7	69	25	85·5	66·5	16·2	+2·1	33	−1	1·9	0·16	−0·77	0·10	10	1	−1·1	...
Kargil (R) ...																						
Mysore																						
Balehonnur ...	85·5	+0·9	92	5	66·8	−0·3	61	10	72·0	69·5	23·6	+0·3	88	+2	...	3·77	−0·38	1·56	10	8	+2·0	...
Sikkim ...																						
Lachen ...	..	...	...	...	43·5	...	36	20	53·1	...	...	...	...	...	...	3·82	...	0·65	25	16	...	...
Tibet																						
Yatung (Chumbi)	64·0	+3·2	69	6	40·7	−1·6	31	8	56·3	52·9	12·5	+1·7	83	0	5·0	2·60	−1·46	0·39	26	10	−1·0	...

(R) Register not received

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 5TH CLASS STATIONS—MAY 1950

Division	Station	Rainfall, inches				Number of rainy days (0.10″ or more)		Division	Station	Rainfall, inches				Numb rainy (0.10″ o
		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal			Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Assam ...	Mawsynram ...	38·86	...	7·75	24	23	...	Jammu & Kashmir	Sonamarg ...	3·71	−1·75	1·50	24	5
West Bengal ...	Bankura ...	1·96	−2·11	0·61	16	5	−0·6		Gurez * ...	...	...	...	...	...
Bihar ...	Muzaffarpur ...	2·64	+0·66	0·97	16,29	3	−0·1	Deccan (Desh) ...	Khandala ...	0·90	+0·11	0·72	24	2
	Chapra ...	0·36	−0·94	0·27	29	1	−0·8	Tamilnad ...	Palayamcottai ...	2·34	+0·71	0·95	20	5
	Arrah ...	0·83	−0·40	0·40	19	3	+1·2	Sikkim ...	Thangu ...	1·41	...	0·40	24	5
Punjab (I) ...	Dalhousie ...	0·23	−1·89	0·12	31	2	−2·2		Lachung ...	6·00	−0·25	1·16	26	15
	Kyelang ...	2·97	+0·66	0·65	28	7	+1·4		Chungthang ...	9·96	...	1·41	25	15
	Gondla ...	5·38	...	1·54	30	7	...							
	Koksar ...	8·73	...	2·17	24	10	...							
	Kothi ..	5·01	...	1·10	28	9	...							
	Dharampore ...	0·62	−1·32	0·30	30	3	−0·4							
	Kharsali ...	4·11	...	0·71	9,31	11	...							
	Rana ...	3·40	...	0·75	30	11	...							
	Jamuna Chetty ...	2·55	...	1·20	12	3	...							

(*) Data not reliable.

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Note :— Data upto 9·0 Km. a.s.l. are given under Table A and data above 9·0 Km. under Table B.

In tables A & B

n represents the number of observations.

V represents the mean wind speed in m/second irrespective of direction.

v represents the resultant mean velocity in m/second.

D represents the direction of the resultant mean wind in degrees East of North.

For the co-ordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Weather Report-January 1950.

The Pilot balloon station at Saharsa was shifted to Bhagalpur (Lat. 25°14'N, Long. 86°57'E. Ht. a. s. l. 60 m.) on 19th May 1950.

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MAY 1950

STATION	AHMEDABAD												ALLAHABAD										
Time in I.S.T.	0230				0730				1430				0230				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	3·1	2·5	255	31	2·6	1·9	261	31	3·7	3·0	246	31	2·6	0·9	66	31	2·2	0·5	93	31	3·5	2·1
0·15 a.g. ...	31	9·5	8·5	266	31	6·3	4·8	263	31	5·8	4·9	245	31	8·2	3·3	74	31	5·4	0·8	142	31	5·3	2·6
0·6 a.s.l. ...	31	10·8	9·8	275	31	8·9	7·6	292	31	5·0	4·3	247	31	7·6	2·9	51	31	5·6	0·2	350	31	5·5	3·0
1·0 ,, ...	31	8·0	7·2	269	30	8·0	6·5	283	31	5·4	4·8	249	31	6·6	3·0	348	31	5·4	1·9	312	31	5·8	3·7
1·5 ,, ...	31	4·9	4·2	266	29	6·1	4·4	260	31	5·9	5·2	249	28	6·2	4·3	313	31	5·4	4·2	306	30	5·7	4·7
2·0 ,, ...	31	4·4	3·1	263	29	4·6	3·0	251	31	5·7	4·6	253	27	7·3	6·5	302	31	7·1	6·6	305	29	7·7	6·8
2·5 ,, ...	31	4·7	2·1	269	29	4·1	2·1	237	31	5·1	3·4	254	26	8·7	8·1	299	30	9·0	8·6	307	26	7·7	7·1
3·0 ,, ...	31	6·0	1·7	283	28	4·6	2·5	235	31	5·0	2·8	259	26	10·6	9·7	298	28	10·4	9·9	308	25	8·6	7·7
4·0 ,, ...	20	4·9	1·2	273	28	6·5	2·6	273	31	6·6	2·4	259	12	13·1	12·3	303	21	11·2	10·0	302	24	11·1	9·9
5·0 ,, ...	14	7·2	4·0	341	27	6·6	2·6	305	31	7·5	3·5	298					20	11·7	10·5	295	23	11·9	10·9
6·0 ,, ...	9	9·0	6·1	12	26	8·0	3·5	331	30	7·8	4·0	309					17	9·9	9·2	293	20	11·8	11·2
7·5 ,, ...	2	11·5	11·5	332	23	10·1	4·4	322	30	11·1	5·9	300					12	10·0	8·5	286	15	11·7	10·1
9·0 ,, ...	2	14·3	12·7	287	21	14·6	11·4	273	28	13·9	8·4	281					10	15·0	14·2	280	8	14·4	13·1

STATION	AMBALA												ANANTAPUR								ASANSOL		
Time in I.S.T.	0230				0730				1430				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	3·8	0·5	11	31	2·8	1·0	78	31	3·9	1·1	270	31	4·6	3·8	256	31	3·1	1·9	305	31	2·1	1·7
0·15 a.g. ...	31	9·5	2·8	353	31	8·1	2·8	73	31	6·7	2·5	272	31	6·9	6·3	259	31	4·9	3·5	303	31	4·9	4·1
0·6 a.s.l. ...	31	10·8	3·1	347	31	9·1	1·7	58	31	6·5	2·4	272	31	7·9	7·6	263	31	4·9	3·5	298	31	5·8	4·8
1·0 ,, ...	31	9·5	3·6	335	31	8·7	2·0	338	31	6·5	2·2	276	31	8·3	7·1	290	31	5·1	4·0	303	31	4·5	3·0
1·5 ,, ...	29	7·4	4·4	315	31	7·4	3·1	304	30	6·1	3·1	283	31	7·2	5·4	317	31	5·2	4·4	314	29	4·8	2·4
2·0 ,, ...	26	6·4	5·8	314	28	6·8	4·3	305	29	6·2	3·4	287	31	6·1	3·9	332	30	5·2	4·5	329	23	5·5	4·3
2·5 ,, ...	25	7·9	7·4	306	25	6·3	5·6	305	27	5·9	4·5	294	30	5·3	3·8	4	28	5·4	4·2	349	15	7·0	6·1
3·0 ,, ...	20	9·0	8·5	300	24	7·8	7·2	309	23	6·0	4·9	303	30	5·7	4·9	31	27	6·0	4·2	14	12	9·9	8·9
4·0 ,, ...					24	9·7	8·7	301	22	7·9	5·9	310	27	7·3	6·5	53	26	7·2	6·1	57	1	15·0	15·0
5·0 ,, ...					17	9·5	7·8	303	20	8·3	6·9	303	25	6·4	5·2	64	23	5·0	3·2	58			
6·0 ,, ...					14	9·3	7·2	297	17	9·1	7·8	300	20	4·5	0·4	40	21	4·4	1·5	321			
7·5 ,, ...					10	10·1	7·5	316	14	11·4	9·9	293	15	6·7	2·9	246	18	7·3	4·9	257			
9·0 ,, ...					9	16·4	11·8	297	9	13·3	11·9	300	13	7·8	2·3	269	15	7·7	4·9	248			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MAY 1950

STATION	ASANSOL												BANGALORE											
Time in I.S.T.	0730				1100				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2·1	1·6	152	31	2·1	1·2	159	31	2·2	1·3	143	31	4·5	3·7	258	31	3·8	3·4	274	31	3·3	2·5	294
1 a.g.	31	4·4	3·2	173	31	4·0	2·9	156	30	3·9	2·2	156	28	8·1	6·7	258	31	6·4	5·6	278	31	5·0	3·8	297
1 a.s.l.	31	5·8	3·9	205	31	4·3	2·5	166	30	4·0	1·9	177	...	...	...	...	...	..	...	...	...	...	...	...
2 ,,	31	5·5	3·5	235	31	4·4	2·1	222	30	3·7	1·4	220	28	5·8	4·9	256	31	5·5	4·9	275	31	4·2	3·3	294
3 ,,	29	5·1	3·5	266	29	5·0	3·3	260	30	4·7	2·6	282	26	8·3	5·5	279	29	8·0	6·6	310	30	4·2	3·1	312
4 ,,	28	6·0	4·5	288	22	5·5	4·4	275	29	6·7	5·0	299	25	4·7	1·5	326	29	6·0	4·5	334	30	4·4	3·1	330
5 ,,	27	6·9	6·0	295	9	7·5	6·0	278	27	7·8	6·9	303	24	5·0	3·9	30	28	5·6	4·3	16	30	4·3	3·1	359
6 ,,	25	9·4	8·6	297	6	7·8	6·7	291	24	9·3	8·3	305	21	6·1	5·7	38	28	5·9	5·1	40	29	4·7	3·8	36
7 ,,	16	11·9	11·3	296					16	11·1	10·6	300					29	7·4	6·5	54	24	5·3	5·1	66
8 ,,	9	11·0	10·7	296					15	11·0	10·5	289					24	5·6	3·8	36	18	5·6	1·8	283
9 ,,	7	9·0	7·4	295					11	11·4	10·8	279					22	5·5	3·0	248	12	5·4	4·2	252
10 ,,	4	11·3	6·9	266					8	15·0	13·4	256					19	5·1	2·7	252	9	3·8	2·1	237
11 ,,	4	12·6	10·7	258					6	16·5	15·8	273					16	6·1	1·7	215	8	3·9	0·3	109

STATION	BAREILLY								BHAGALPUR												BHOPAL			
Time in I.S.T.	0730				1430				0730				1100				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2·3	1·6	75	31	2·6	0·8	295	13	2·1	1·8	110	13	1·9	1·8	63	13	2·8	1·8	44	31	4·4	3·6	279
1 a.g.	31	6·7	1·4	73	31	5·3	2·7	308	13	5·2	3·6	130	13	4·5	3·0	91	13	5·6	2·2	5	31	10·1	8·6	292
1 a.s.l.	31	8·1	0·5	42	31	6·2	3·0	294	10	5·7	2·6	190	11	4·2	2·6	109	13	5·5	1·4	35	31	9·7	8·4	284
2 ,,	31	7·2	2·7	296	31	6·8	3·5	292	9	4·9	1·8	208	9	5·1	4·2	129	9	5·3	2·1	88	30	10·3	9·0	300
3 ,,	31	6·7	4·5	297	30	6·9	4·6	281	7	5·6	0·9	196	4	5·4	2·5	138	8	6·6	0·7	262	30	9·1	8·8	308
4 ,,	30	7·3	6·4	300	29	7·6	6·4	285	7	6·1	2·9	279	3	6·3	1·8	129	7	7·7	4·1	305	27	6·9	6·3	312
5 ,,	26	8·1	7·5	301	28	8·9	8·3	289	4	5·1	2·8	303	1	4·5	4·5	341					24	5·4	4·0	312
6 ,,	26	10·4	10·0	301	25	9·9	9·1	289	4	6·1	5·3	299	1	4·0	4·0	299					24	5·3	3·0	308
7 ,,	21	11·8	11·2	293	24	11·9	11·4	297	3	9·8	9·4	308									18	7·2	3·6	299
8 ,,	13	11·3	9·8	313	23	13·5	12·8	301	2	7·7	7·7	295									5	7·4	4·8	330
9 ,,	10	11·0	8·7	298	18	11·4	10·7	293													1	7·0	7·0	260
10 ,,	5	6·0	5·0	298	13	12·1	10·7	295																
11 ,,	5	15·0	13·5	290	9	11·3	8·5	312																

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MAY 1950

STATION	BHOPAL								BHUJ												BIKANER		
Time in I.S.T.	0730				1430				0230				0730				1430				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	4·3	3·8	285	31	3·0	1·9	276	31	2·4	2·2	239	31	1·6	1·5	233	31	4·2	3·8	243	31	2·7	2·2
0·15 a. g. ...	31	8·5	7·6	299	31	5·3	3·9	284	31	9·3	8·4	259	31	8·1	7·1	254	31	7·6	6·9	248	30	8·1	5·2
0·6 a.s.l. ...	31	7·3	6·6	293	31	5·2	3·5	279	30	12·9	11·7	272	31	12·5	10·8	277	31	7·3	6·7	255	29	9·6	6·6
1·0 ,, ...	31	9·1	8·3	319	31	5·3	4·1	289	29	9·5	8·4	276	31	10·1	8·7	281	31	7·1	6·5	254	29	8·0	6·3
1·5 ,, ...	31	7·3	6·5	326	31	5·3	4·3	289	27	7·1	6·1	278	28	7·8	6·3	276	29	5·9	4·9	266	29	6·7	5·7
2·0 ,, ...	31	5·8	4·5	321	30	5·5	4·5	284	25	5·9	4·1	277	24	6·7	4·3	280	28	5·1	3·5	259	29	6·7	5·8
2·5 ,, ...	29	5·3	3·4	330	29	5·7	4·8	290	22	5·2	2·3	295	21	6·1	2·7	280	28	4·9	3·0	275	27	3·7	6·4
3·0 ,, ...	28	4·9	2·6	311	28	5·5	4·6	289	19	4·8	2·0	341	16	5·9	2·1	359	26	5·0	2·6	296	23	7·5	6·1
4·0 ,, ...	26	6·7	2·7	276	25	7·3	5·8	284	15	5·3	3·0	343	13	7·2	3·6	349	26	6·2	2·5	313	16	7·5	4·2
5·0 ,, ...	22	7·7	5·9	273	20	7·4	6·0	285	2	5·0	4·3	238	13	8·5	4·1	337	26	8·0	3·2	322	14	8·9	5·7
6·0 ,, ...	20	8·1	5·7	308	19	8·7	6·4	299	1	3·0	3·0	280	11	8·6	5·2	304	26	8·7	4·1	324	13	12·7	9·5
7·5 ,, ...	16	10·6	8·3	292	14	10·0	7·3	298					8	11·1	8·0	331	23	10·6	5·1	325	11	17·0	14·0
9·0 ,, ...	12	13·0	12·0	292	10	15·7	13·6	269					8	13·5	12·1	295	19	13·2	8·5	303	6	13·0	11·1

STATION	BIKANER				BOMBAY												CALCUTTA						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	2·4	2·1	261	31	1·8	1·4	250	31	1·8	1·2	247	31	5·8	5·0	264	31	3·4	2·3	173	31	3·5	2·4
0·15 a. g. ...	31	5·4	4·7	256	31	4·1	2·9	262	31	3·6	1·8	237	31	5·9	5·0	269	31	7·3	5·3	165	31	4·7	3·4
0·6 a.s.l. ...	31	5·8	5·1	262	31	5·5	4·2	284	31	5·5	3·0	291	31	5·9	4·3	291	29	10·3	9·3	197	31	7·9	6·8
1·0 ,, ...	31	5·8	5·0	264	31	6·0	4·8	292	30	6·0	4·4	308	31	5·6	3·6	306	29	8·8	7·7	205	31	7·4	6·1
1·5 ,, ...	25	5·2	4·3	266	29	5·2	3·8	306	26	6·5	4·9	310	31	5·4	3·3	311	27	6·6	4·3	241	25	5·9	4·1
2·0 ,, ...	24	5·2	4·6	267	27	5·2	3·4	298	26	6·5	4·8	297	28	5·9	3·0	295	25	6·8	4·7	268	22	5·8	4·2
2·5 ,, ...	23	5·9	5·1	268	22	5·1	3·6	277	19	5·8	3·7	247	27	6·5	2·7	255	23	7·3	6·1	296	16	6·0	4·9
3·0 ,, ...	23	6·1	5·1	267	19	4·4	2·5	240	19	6·1	4·1	216	26	5·7	2·6	213	22	8·6	7·4	308	15	6·8	6·1
4·0 ,, ...	22	8·8	6·7	279	7	4·1	2·1	165	12	5·5	4·4	201	25	5·7	3·3	213	4	11·7	8·5	309	12	9·2	8·9
5·0 ,, ...	19	9·9	6·8	273	3	2·5	2·1	165	10	5·1	2·0	233	25	4·9	1·2	242					8	12·4	12·1
6·0 ,, ...	15	10·2	7·2	305					8	5·3	4·2	321	24	6·7	2·5	290					7	8·9	8·1
7·5 ,, ...	11	15·1	11·9	303					8	9·5	7·7	296	22	10·8	4·7	271					3	12·2	11·6
9·0 ,, ...	6	15·1	11·7	293					5	10·5	10·0	305	19	13·9	11·0	253					1	12·5	12·5

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MAY 1950

STATION	CALCUTTA								COCHIN (Willingdon Island)												COOCH BEHAR			
Time in I.S.T.	1100				1430				0230				0730				1430				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	4·9	4·3	187	31	5·0	4·4	185	31	2·4	0·8	323	31	1·4	0·5	44	31	4·8	4·3	282	31	1·7	1·4	77
1·5 a.g. ...	31	5·9	5·3	186	31	6·8	6·4	181	28	4·1	2·9	311	29	3·1	1·7	4	27	5·4	5·0	290	23	4·0	3·0	80
1·6 a.s.l. ...	31	6·0	5·3	189	31	6·4	5·6	187	28	5·5	5·2	301	29	5·7	5·1	298	27	7·2	6·9	294	22	4·8	3·4	103
2·0 ,, ...	31	6·3	5·0	203	31	5·4	4·3	199	23	6·0	5·5	299	26	6·6	5·8	294	24	6·4	5·8	303	20	4·3	1·7	131
2·5 ,, ...	25	6·1	4·4	239	29	5·3	2·9	233	13	5·8	5·2	300	22	6·0	5·1	298	22	5·6	4·4	326	16	4·6	2·5	231
3·0 ,, ...	23	6·7	5·1	264	27	6·3	4·1	269	9	5·9	3·5	299	16	5·1	3·5	327	20	6·0	3·6	2	15	4·8	3·3	253
3·5 ,, ...	13	6·8	5·8	295	25	7·4	6·1	284	5	6·0	3·3	31	13	6·7	4·2	46	16	6·6	5·4	35	14	6·1	4·9	251
4·0 ,, ...	10	6·3	5·6	294	23	8·7	8·1	306	2	2·5	2·5	37	11	8·5	7·1	62	16	7·7	6·5	45	12	6·1	4·7	249
4·5 ,, ...					19	11·1	10·5	302					8	6·8	4·5	49	12	6·3	4·9	41	9	7·4	5·3	268
5·0 ,, ...					17	11·6	11·2	300					4	5·3	3·8	293	7	4·4	0·9	297	7	7·0	5·7	270
5·5 ,, ...					15	10·9	10·1	291					4	6·5	6·3	251	6	5·7	2·7	257	5	5·7	4·9	265
6·0 ,, ...					9	12·5	10·1	261					4	3·6	3·6	273	4	7·7	7·6	238	3	6·8	6·4	222
6·5 ,, ...					6	16·7	13·2	270					3	1·7	1·4	249	3	4·0	3·0	221	2	19·7	19·7	245

STATION	COOCH BEHAR				CUTTACK																DEOLALI			
Time in I.S.T.	1430				0230				0730				1100				1430				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·3	0·9	107	31	1·8	1·2	195	31	1·9	1·7	199	31	2·5	2·0	190	31	2·7	2·1	181	28	3·1	2·9	251
1·15 a.g. ...	23	2·4	1·3	141	31	5·8	4·6	195	31	4·7	4·5	198	30	5·9	4·9	197	30	7·0	5·7	178	28	6·0	5·4	255
1·6 a.s.l. ...	23	3·2	1·7	155	28	7·9	7·0	202	30	6·0	4·8	213	29	5·2	4·1	210	30	5·3	3·8	200	28	4·3	3·8	252
2·0 ,, ...	21	3·8	1·4	181	23	6·5	5·3	205	24	6·0	3·7	239	28	5·4	3·7	234	29	4·2	2·0	250	28	7·8	6·5	288
2·5 ,, ...	19	4·1	1·3	235	21	4·9	2·3	218	22	5·4	2·3	262	19	5·4	3·3	299	28	4·5	2·9	319	26	7·3	5·9	308
3·0 ,, ...	17	5·0	3·4	271	17	4·4	1·1	227	21	4·7	2·0	330	15	7·2	4·4	319	28	5·1	3·4	325	24	5·9	3·8	303
3·5 ,, ...	16	6·4	5·2	267	14	4·9	2·4	302	19	5·3	3·1	346	8	5·9	3·4	353	27	5·2	4·0	325	23	5·8	3·5	254
4·0 ,, ...	16	7·4	6·2	275	12	6·5	4·3	340	17	6·4	5·3	3	7	6·0	5·4	344	27	5·7	4·7	332	23	6·1	3·2	231
4·5 ,, ...	12	8·0	5·9	265	6	9·5	8·2	307	11	7·1	5·5	337					24	6·3	5·6	333	23	5·9	3·2	219
5·0 ,, ...	10	8·1	7·1	262					8	6·9	5·8	336					22	6·5	5·6	312	23	6·1	1·0	264
5·5 ,, ...	10	6·5	5·9	254					7	7·7	4·1	289					21	8·3	7·5	271	20	6·7	3·3	333
7·5 ,, ...	9	11·8	10·9	249					5	10·9	8·0	243					20	13·5	11·9	255	16	11·3	7·1	306
9·0 ,, ...	7	19·3	19·1	242					5	11·3	9·4	259					16	12·7	10·9	251	16	15·7	12·5	276

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MAY 1950

STATION	DIBRUGARH								GADAG												GAYA		
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	1·9	1·0	38	31	2·4	1·3	36	31	6·1	5·7	255	31	4·7	4·3	254	31	2·7	1·7	290	31	3·0	2·0
0·15 a.g. ...	21	2·7	1·7	54	29	3·2	1·5	46	31	10·0	9·2	264	30	8·3	7·7	258	31	4·7	3·5	294	31	5·8	3·4
0·6 a.s.l. ...	21	3·2	2·2	53	28	3·2	1·2	101	...	...	...	...	...	...	...	...	...	...	...	...	31	6·7	3·1
1·0 ,, ...	30	2·7	1·0	78	27	2·8	1·1	165	30	11·1	10·1	291	30	8·5	7·0	293	31	5·7	4·4	298	31	5·5	1·4
1·5 ,, ...	18	1·9	0·3	140	24	3·4	2·8	221	30	8·9	7·9	327	28	8·4	6·6	336	31	5·6	4·7	312	31	5·7	4·3
2·0 ,, ...	17	2·5	0·7	223	20	3·5	2·8	219	30	6·0	4·4	331	27	6·5	5·6	351	30	5·2	4·2	320	28	6·7	5·7
2·5 ,, ...	16	3·5	1·9	238	19	3·5	3·0	230	29	4·3	1·9	44	26	5·8	3·2	358	29	5·1	3·8	351	19	9·3	8·7
3·0 ,, ...	15	4·3	2·6	255	18	3·9	3·2	227	29	4·3	2·7	65	25	4·7	2·3	35	28	4·6	3·0	13	17	11·5	11·1
4·0 ,, ...	13	4·1	3·3	241	18	4·4	3·9	234	26	6·3	4·7	69	23	5·9	4·4	73	26	5·2	3·2	81			
5·0 ,, ...	11	5·8	4·5	242	17	6·7	5·7	239	20	6·7	3·6	81	23	5·3	4·0	71	22	5·3	2·7	72			
6·0 ,, ...	10	7·2	6·3	240	13	8·4	6·8	243	2	6·0	3·1	134	22	5·8	2·1	3	18	6·2	2·3	27			
7·5 ,, ...	5	8·6	8·0	266	10	10·1	8·3	244					21	9·8	4·8	280	12	6·3	3·3	280			
9·0 ,, ...	3	6·7	4·4	272	4	14·1	13·1	287					18	8·9	4·1	258	10	9·1	6·9	264			

STATION	GAYA								GOPALPUR								GORAKHPUR		
Time in I.S.T.	0730				1100				1430				0730				1430				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	2·8	1·4	103	31	3·5	0·8	340	31	4·7	3·0	333	31	4·8	4·1	207	31	6·2	5·4	186	31	2·6	1·6
0·15 a.g. ...	31	4·8	1·6	158	31	4·4	0·9	345	31	6·1	4·0	344	31	8·9	7·5	207	31	10·7	9·4	187	30	7·5	6·2
0·6 a.s.l. ...	31	5·6	2·5	218	31	4·1	0·2	37	31	5·7	3·8	332	31	5·9	4·0	222	31	5·5	3·5	198	30	6·9	4·3
1·0 ,, ...	31	5·8	2·0	250	31	4·5	1·5	256	31	5·8	4·3	321	29	5·7	3·7	240	31	4·1	1·8	289	30	7·9	0·5
1·5 ,, ...	31	5·7	3·5	291	31	5·7	3·1	277	30	6·1	4·7	313	28	5·6	3·4	268	29	5·2	3·3	332	28	6·5	2·4
2·0 ,, ...	28	5·8	4·8	301	28	7·2	5·3	293	29	6·8	5·7	301	27	5·4	2·6	304	29	4·8	3·4	349	26	6·7	5·1
2·5 ,, ...	27	7·9	7·3	305	24	8·6	8·0	304	27	7·8	7·2	295	23	4·8	2·9	320	28	4·3	3·0	356	24	8·4	7·9
3·0 ,, ...	27	10·2	9·8	302	19	9·7	8·9	305	24	9·0	8·2	290	21	5·5	4·0	340	27	5·3	4·0	3	20	9·7	9·2
4·0 ,, ...	17	10·9	10·6	297	1	19·5	19·5	300	23	11·5	10·7	284	10	7·8	6·6	355	24	5·6	4·2	2	17	12·7	12·1
5·0 ,, ...	13	11·5	11·1	292					18	12·7	12·3	286	8	7·0	5·1	2	17	5·5	4·9	336	8	13·1	12·9
6·0 ,, ...	11	9·6	9·0	280					15	11·9	11·1	279	8	5·7	4·0	301	15	5·9	3·9	270	8	10·9	10·3
7·5 ,, ...	6	8·9	8·0	282					11	12·2	11·3	268	5	8·7	7·3	265	12	9·9	9·1	249	6	11·3	9·2
9·0 ,, ...	4	14·0	13·0	260					5	18·3	17·7	251	3	7·2	3·8	262	11	10·7	9·1	250	4	15·1	13·3

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MAY 1950

STATION	GORAKHPUR				HYDERABAD (Dn.)												JAGDALPUR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·6	0·5	280	31	3·7	1·8	226	31	4·1	2·8	285	31	3·4	2·1	343	31	1·6	1·0	202	31	1·6	1·3	205
0·15 a. g. ...	31	4·3	0·7	318	31	7·6	3·7	216	31	7·1	5·1	285	31	5·1	3·0	342	28	6·7	5·0	210	31	5·4	4·2	220
0·6 a.s.l. ...	31	4·5	1·0	289	31	5·6	2·5	235	31	5·3	3·7	281	31	4·5	2·7	347	28	5·0	3·7	210	31	3·7	2·9	218
1·0 ,, ...	31	5·1	1·7	274	31	9·2	3·8	231	31	9·9	7·3	234	31	5·0	3·4	341	28	6·8	4·6	231	31	7·2	5·2	245
1·5 ,, ...	31	6·4	4·3	284	31	6·8	2·6	268	31	8·8	5·8	319	31	4·8	3·7	348	28	5·6	3·1	281	31	6·9	4·8	285
2·0 ,, ...	29	7·5	6·9	289	31	4·8	2·0	326	31	6·4	3·7	335	31	5·1	3·8	359	26	5·3	2·9	332	31	6·4	4·1	323
2·5 ,, ...	27	9·8	9·3	294	30	5·4	3·3	356	30	5·4	2·9	360	30	6·6	5·0	9	27	6·3	4·5	341	31	6·5	4·8	344
3·0 ,, ...	26	11·3	10·8	297	26	5·5	4·3	6	29	4·9	3·1	26	29	5·5	4·1	4	25	6·8	5·4	342	31	6·8	5·2	1
4·0 ,, ...	22	12·5	12·0	299	9	6·9	5·9	17	27	5·6	4·0	55	22	5·9	3·5	11	20	6·9	6·1	346	27	6·2	5·0	17
5·0 ,, ...	15	11·8	11·2	298	3	7·8	6·6	13	23	5·8	4·4	65	14	5·1	2·3	13	10	6·8	5·5	354	24	5·6	3·7	10
6·0 ,, ...	14	11·9	11·4	292					19	6·3	3·2	25	13	5·4	3·5	326	3	7·5	6·9	324	20	5·1	2·4	283
7·5 ,, ...	11	11·1	10·9	290					14	7·7	6·6	297	12	6·7	3·5	295					19	8·8	6·5	263
9·0 ,, ...	9	14·6	13·3	279					10	9·5	7·1	265	11	9·9	7·3	270					18	9·1	6·5	253

STATION	JAGDALPUR				JAMSHEDPUR												JHARSUGUDA							
Time in I.S.T.	1430				0730				1100				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·5	0·6	298	31	1·8	0·5	232	31	2·1	0·6	251	31	3·2	0·8	98	31	2·2	1·7	143	31	0·8	0·7	130
0·15 a. g. ...	31	4·9	1·8	324	31	2·7	1·1	211	31	3·1	1·1	216	31	4·8	0·5	32	31	6·4	4·6	148	31	3·4	2·3	147
0·6 a.s.l. ...	31	4·3	1·6	323	31	4·7	3·6	218	31	3·1	1·4	209	31	4·0	0·4	152	31	7·7	5·4	186	31	5·0	2·7	202
1·0 ,, ...	31	4·7	2·6	313	31	6·6	4·6	239	31	4·1	2·1	223	31	4·0	0·8	277	31	8·0	5·2	208	31	5·9	2·8	235
1·5 ,, ...	31	4·7	3·2	322	30	6·3	4·0	266	31	5·7	2·9	267	31	3·8	1·9	293	31	6·8	3·3	234	31	6·6	2·6	273
2·0 ,, ...	29	5·0	3·7	319	30	5·0	2·7	300	25	5·9	3·9	295	31	4·9	3·0	302	29	5·7	3·6	307	31	5·9	3·1	308
2·5 ,, ...	29	5·6	4·2	336	28	5·0	4·1	294	10	5·3	4·2	306	29	5·9	4·8	306	28	6·0	4·8	332	31	5·7	4·1	321
3·0 ,, ...	29	6·0	4·6	354	25	6·8	6·1	312	9	6·5	5·4	308	28	8·1	6·7	309	26	7·0	6·1	324	30	6·6	5·6	319
4·0 ,, ...	27	6·5	4·9	8	15	9·9	9·7	296					20	9·6	8·7	297	20	7·3	6·2	317	28	7·5	6 5	312
5·0 ,, ...	22	5·9	4·1	351	11	11·2	10·8	305					17	9·9	9·3	285					22	7·9	7·4	299
6·0 ,, ...	17	6·1	3·9	295	11	10·3	9·1	286					17	11·1	10·6	274					21	6·6	5·6	293
7·5 ,, ...	14	9·3	7·4	253	11	13·4	12·7	252					11	16·1	15·3	254					16	9·4	8·0	257
9·0 ,, ...	13	10·2	9·0	241	8	15·4	13·3	253					9	15·9	15·0	255					13	10·5	9·1	254

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MAY 1950

STATION	JHARSUGUDA				JODHPUR												JABALPUR						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	1·0	0·4	278	31	4·6	3·0	249	31	4·4	3·8	235	31	4·9	4·2	248	31	1·7	1·1	265	31	1·5	1·1
0·15 a.g. ...	30	3·0	1·4	262	31	11·8	8·6	251	30	8·3	6·6	235	31	7·0	6·4	240	31	6·0	3·1	282	31	5·0	3·6
0·6 a.s.l. ...	30	3·5	1·4	267	31	13·5	10·7	246	30	10·1	7·6	249	31	7·8	7·2	240	31	6·4	3·2	283	31	5·4	3·7
1·0 ,, ...	30	3·4	1·6	269	30	11·8	9·9	252	30	9·8	8·3	248	30	7·8	7·1	238	31	6·8	4·9	318	31	7·2	4·5
1·5 ,, ...	31	3·3	2·3	287	28	8·8	7·9	259	30	7·7	6·3	256	28	7·8	7·1	242	31	6·1	5·4	321	31	7·0	5·0
2·0 ,, ...	31	4·0	2·6	297	26	6·3	4·4	267	28	6·4	4·9	269	25	7·5	6·9	245	31	5·6	5·1	309	31	6·3	5·2
2·5 ,, ...	31	4·9	3·5	311	22	5·4	3·6	273	24	7·0	5·5	270	23	5·6	5·0	250	29	5·8	5·4	303	30	6·2	5·0
3·0 ,, ...	31	5·7	4·3	314	21	6·2	3·1	272	21	6·7	4·5	265	23	5·4	4·3	250	24	5·5	4·5	302	30	6·1	4·4
4·0 ,, ...	27	8·2	7·1	310	6	7·1	2·3	355	16	8·6	3·3	300	21	7·0	3·8	262	5	5·7	3·9	274	27	7·2	5·0
5·0 ,, ...	23	8·5	7·7	300	4	11·0	8·9	15	15	8·4	5·5	291	21	9·5	5·4	290	1	8·0	8·0	245	20	8·9	6·5
6·0 ,, ...	23	8·7	7·7	290	2	15·0	14·5	17	13	11·2	7·2	308	19	11·4	7·0	312	1	5·0	5·0	285	17	8·2	7·0
7·5 ,, ...	21	10·9	10·2	263					10	14·5	10·2	311	19	14·9	11·4	307					13	9·9	8·4
9·0 ,, ...	18	14·3	13·2	250					8	17·5	11·8	309	16	18·2	13·7	308					10	14·5	13·5

STATION	JABALPUR				MADHOSAGAR												MADRAS						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	1·8	1·1	278	31	2·7	1·9	244	31	1·6	1·3	192	31	3·3	2·8	285	31	3·8	3·3	198	31	3·5	2·9
0·15 a.g. ...	31	3·6	2·8	291	31	6·1	2·0	289	31	4·8	2·6	273	31	5·3	4·7	293	31	7·5	6·5	215	31	6·7	5·3
0·6 a s l. ...	31	3·8	2·9	292	31	7·2	2·6	292	31	6·6	3·7	302	31	5·3	4·6	291	31	9·2	7·8	222	31	9·3	7·0
1·0 ,, ...	31	4·4	3·5	296	31	6·7	3·5	297	30	7·6	5·2	309	30	4·8	4·3	291	31	7·6	4·3	231	31	8·0	5·5
1·5 ,, ...	31	4·9	4·1	298	31	6·2	5·2	305	28	6·9	5·5	315	30	4·7	3·9	294	31	5·1	2·0	298	30	6·1	2·9
2·0 ,, ...	31	5·1	4·3	306	30	6·3	5·7	300	26	6·2	5·5	311	29	4·7	3·7	291	29	5·5	3·9	352	30	5·4	3·3
2·5 ,, ...	31	5·7	4·9	306	26	6·6	5·8	294	25	6·7	6·0	307	27	5·1	4·3	286	27	6·3	5·2	16	27	5·9	4·8
3·0 ,, ...	30	6·3	5·3	314	22	6·6	5·8	289	24	7·3	6·5	297	26	6·4	5·8	288	27	6·9	6·0	30	27	6·9	6·4
4·0 ,, ...	28	7·2	5·8	313	7	6·8	5·2	288	20	8·5	7·3	296	21	7·5	6·7	285	19	6·3	5·4	37	26	7·9	7·2
5·0 ,, ...	20	8·9	7·5	306	3	8·2	7·9	265	17	10·0	8·2	298	17	9·5	8·8	286	1	2·0	2·0	180	24	6·0	2·7
6·0 ,, ...	17	9·1	8·1	300					15	8·3	7·0	295	16	10·8	9·2	293					23	5·6	3·3
7·5 ,, ...	13	10·9	9·4	297					12	10·0	8·7	286	13	14·5	11·0	295					20	5·1	2·8
9·0 ,, ...	8	12·6	11·1	291					9	15·4	13·6	284	7	14·6	14·0	300					16	4·7	2·2

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MAY 1950

STATION	MADRAS				MALEGAON												MANGALORE							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	5·4	3·6	156	31	4·6	4·4	270	31	3·1	2·7	277	31	3·1	2·1	314	31	2·8	0·8	298	31	1·8	0·4	31
0·15 a.g. ...	31	6·8	3·9	169	31	9·7	9·3	274	31	6·6	6·1	288	31	4·7	3·8	300	28	4·4	2·9	305	30	3·3	1·5	353
0·6 a.s.l. ...	31	5·3	3·1	257	31	9·7	9·3	274	31	6·6	6·1	288	31	4·7	3·8	300	28	4·5	3·6	300	30	4·2	3·3	309
1·0 ,, ...	30	4·8	3·4	287	31	9·7	8·8	299	31	8·0	7·3	304	31	4·5	3·3	305	24	4·7	3·3	296	28	4·3	3·1	308
1·5 ,, ...	30	5·6	4·0	311	31	8·9	7·8	320	31	6·5	5·5	338	31	4·9	3·4	316	20	4·9	3·1	291	18	6·1	4·3	338
2·0 ,, ...	29	5·3	3·8	341	31	6·4	4·9	338	31	5·7	3·5	347	31	4·6	2·7	309	12	4·9	3·3	322	16	6·2	4·2	343
2·5 ,, ...	29	5·8	4·1	10	31	5·7	3·1	334	31	5·6	1·7	310	31	4·4	2·1	299	7	4·9	3·3	6	15	5·0	2·5	16
3·0 ,, ...	28	6·4	4·7	25	30	5·5	1·2	311	31	5·5	1·2	237	28	4·3	1·8	260	3	8·7	7·1	63	15	4·5	3·7	61
4·0 ,, ...	27	7·2	6·1	49	29	5·9	1·6	205	30	6·6	2·8	224	28	5·7	2·0	234	1	9·5	9·5	80	10	7·7	7·4	74
5·0 ,, ...	26	6·3	3·6	23					28	6·5	2·5	226	23	6·3	2·8	261					9	5·7	4·9	67
6·0 ,, ...	26	6·7	2·7	302					25	7·0	2·7	302	20	6·6	3·1	276					9	6·3	3·0	12
7·5 ,, ...	21	6·3	4·6	260					21	9·0	5·1	312	17	9·8	5·5	277					7	6·6	4·7	272
9·0 ,, ...	21	5·1	2·7	226					16	10·8	6·4	277	12	11·9	8·7	271					7	7·1	5·4	249

STATION	MANGALORE				MASULIPATAM												NAGERCOIL							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·9	3·4	278	31	2·4	1·3	200	31	2·1	1·5	229	31	4·5	2·9	160	31	5·6	5·4	283	31	5·2	1·5	308
0·15 a.g. ...	31	5·5	5·2	287	29	6·9	4·6	194	31	6·0	3·4	227	30	6·2	2·9	181	31	10·2	10·0	293	29	9·5	9·4	293
0·6 a.s.l. ...	31	5·1	4·5	297	29	8·0	5·2	198	31	8·3	5·3	242	30	4·9	3·4	258	31	14·1	13·7	295	29	14·6	14·3	300
1·0 ,, ...	31	4·3	3·3	330	29	6·0	2·4	196	30	7·3	4·3	243	30	5·1	3·9	291	31	12·7	12·5	296	29	12·8	12·5	299
1·5 ,, ...	31	5·3	3·8	346	25	5·1	1·6	305	30	5·5	2·7	279	30	5·7	4·5	310	31	7·9	7·0	295	29	8·6	8·1	298
2·0 ,, ...	29	4·8	4·3	356	24	4·3	2·8	336	29	5·0	3·4	322	30	5·4	4·0	332	31	8·0	4·4	317	29	6·6	4·1	311
2·5 ,, ...	27	5·2	3·7	10	23	4·4	3·2	352	29	5·3	4·2	9	29	5·9	3·9	3	30	8·9	4·1	348	29	7·1	3·1	358
3·0 ,, ...	25	5·2	3·4	44	23	4·8	3·7	358	29	6·5	5·4	28	28	6·5	5·0	22	28	8·7	5·6	49	29	8·1	3·4	26
4·0 ,, ...	19	7·2	6·4	83	19	5·3	3·7	20	25	7·4	6·5	39	25	6·3	5·1	41	6	5·1	4·6	55	27	8·4	5·2	36
5·0 ,, ...	18	6·8	3·2	74					21	6·6	5·3	36	18	3·9	2·7	26					25	6·3	3·5	13
6·0 ,, ...	16	5·8	3·5	325					17	5·8	2·6	17	17	5·2	1·9	275					25	6·3	2·3	297
7·5 ,, ...	13	5·2	2·6	250					15	7·0	4·5	247	17	8·5	6·2	252					17	5·7	2·3	254
9·0 ,, ...	9	4·9	1·6	243					9	8·3	3·6	254	15	8·2	3·7	246					14	5·4	4·1	234

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MAY 1950

STATION	NAGERCOIL				NAGPUR												NEW DELHI						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	7·9	7·7	268	31	3·8	3·1	310	31	3·0	1·6	303	31	2·9	1·8	292	31	2·9	0·8	308	31	2·5	0·6
0·15 a. g. ...	31	12·2	11·9	269	31	8·1	6·1	314	31	6·1	3·6	318	31	3·7	1·8	300	31	10·0	2·1	328	31	6·0	1·5
0·6 a.s.l. ...	31	13·4	13·2	286	31	9·2	7·1	317	31	7·9	5·5	326	31	4·0	2·5	298	31	10·3	2·7	336	31	7·5	3·0
1·0 ,, ...	31	12·8	12·4	295	31	8·7	6·9	327	31	8·9	6·8	335	31	4·3	3·1	305	31	8·3	3·8	320	30	6·6	3·9
1·5 ,, ...	31	10·7	9·7	303	31	7·4	5·8	328	31	7·4	5·7	345	31	4·2	3·0	306	28	6·9	4·6	298	30	7·0	5·3
2·0 ,, ...	31	10·0	7·8	302	30	5·9	4·3	334	31	5·5	4·1	347	28	3·5	2·5	295	26	7·2	5·9	299	28	6·9	6·0
2·5 ,, ...	30	9·3	4·8	314	26	6·0	4·5	333	30	5·2	3·3	346	27	4·4	3·6	302	18	7·8	7·1	293	27	7·4	6·6
3·0 ,, ...	30	10·0	4·0	337	23	5·5	3·3	327	30	5·2	2·3	344	27	4·5	3·9	311	16	10·1	9·3	281	23	8·4	6·6
4·0 ,, ...	26	8·9	5·3	36	13	4·1	2·1	348	27	5·3	1·7	263	23	5·9	4·4	309	7	11·3	10·4	284	18	10·8	9·2
5·0 ,, ...	23	8·2	4·3	7	4	2·3	1·7	305	21	5·0	3·9	261	20	6·1	4·7	310					17	8·9	7·8
6·0 ,, ...	21	7·9	4·2	329	2	5·5	3·3	250	18	6·8	5·3	281	15	8·1	6·4	312					15	10·8	8·8
7·5 ,, ...	17	6·9	2·9	267					10	11·5	10·5	255	12	10·7	9·5	290					11	11·6	8·7
9·0 ,, ...	16	6·3	1·6	243					7	15·1	13·2	274	10	12·2	9·1	278					9	16·2	14·6

STATION	NEW DELHI				POONA												PORT BLAIR						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	4·1	2·2	296	31	2·3	2·2	280	31	2·0	1·8	281	31	5·4	4·7	309	31	2·7	1·5	236	31	2·1	1·1
0·15 a. g. ...	31	5·2	2·2	302	31	5·9	5·7	270	31	4·2	3·9	273	30	6·9	6·2	257	30	4·8	3·2	234	31	4·7	2·3
0·6 a.s.l. ...	31	5·7	3·0	291	31	4·1	3·8	262	31	3·0	2·8	265	30	5·0	4·5	284	30	6·0	3·7	232	30	6·0	3·6
1·0 ,, ...	30	5·6	3·1	284	31	7·7	7·2	279	31	6·6	6·0	291	30	6·5	5·8	284	28	5·3	3·2	251	28	5·6	2·9
1·5 ,, ...	29	4·8	3·1	285	31	8·8	7·8	297	30	7·2	5·7	309	31	6·4	5·4	283	22	3·7	1·9	265	28	5·7	2·3
2·0 ,, ...	27	5·0	4·0	286	31	6·1	3·8	299	30	5·5	2·9	309	31	5·5	3·9	291	19	3·3	1·7	283	27	5·0	1·3
2·5 ,, ...	27	6·0	5·1	278	30	5·5	0·3	305	30	5·1	0·5	239	28	5·4	2·1	282	12	3·3	1·3	355	27	4·9	0·1
3·0 ,, ...	26	7·3	6·1	279	27	5·4	1·5	149	30	5·9	1·7	155	27	5·9	1·3	246	10	14·1	2·7	26	27	5·6	0·7
4·0 ,, ...	23	9·0	7·8	281	15	4·2	2·2	153	27	5·3	1·9	145	23	5·0	1·9	185	2	3·0	2·9	6	20	4·8	2·3
5·0 ,, ...	19	11·6	10·2	294					24	5·1	1·4	346	21	5·0	1·0	357					17	5·1	3·5
6·0 ,, ...	16	11·4	9·8	297					22	6·8	3·6	329	17	6·4	3·1	325					15	5·4	0·8
7·5 ,, ...	13	10·9	9·8	300					17	8·6	6·6	240	14	10·2	5·8	309					12	4·1	1·3
9·0 ,, ...	8	16·2	14·3	289					11	7·3	6·4	318	13	13·1	10·3	274					8	2·7	2·1

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MAY 1950

STATION	PORT BLAIR				RAIPUR												SAHARSA							
Time in I.S.T.	1430				0230				0730				1430				0730				1100			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·1	1·6	227	31	2·9	1·9	206	31	3·0	2·3	242	31	1·9	1·1	325	19	2·7	2·6	81	19	3·2	3·0	83
·15 a.g. ...	30	4·8	2·2	231	31	7·7	5·1	236	31	6·9	5·7	245	31	3·6	2·0	309	19	9·4	9·2	87	19	7·0	6·7	84
·6 a.s.l. ...	30	6·0	2·8	241	31	8·2	5·3	244	31	8·5	7·0	255	31	3·9	2·4	308	19	8·1	7·2	110	19	7·1	7·0	92
·0 ,, ...	25	5·8	3·4	257	31	6·6	4·1	282	31	6·8	5·1	280	31	4·2	3·2	314	19	6·0	3·9	142	18	6·2	5·2	115
·5 ,, ...	22	5·2	2·7	274	31	5·7	4·1	308	31	5·8	4·3	321	31	4·5	3·4	309	19	7·0	3·3	226	17	6·6	2·6	222
·0 ,, ...	20	5·5	2·7	287	31	5·6	4·5	318	31	5·8	4·8	341	31	4·4	3·4	322	19	7·6	4·2	256	15	7·9	6·2	250
·5 ,, ...	19	5·6	2·4	284	29	5·7	4·6	321	31	6·0	5·1	345	29	4·6	3·5	317	19	8·3	6·7	286	10	9·3	8·7	273
·0 ,, ...	18	6·5	2·6	293	26	5·6	4·7	327	31	6·0	4·9	341	28	4·9	3·8	311	19	9·9	9·9	292	6	8·8	8·0	276
·0 ,, ...	12	4·8	1·6	296	2	5·5	5·5	336	28	6·2	4·7	330	28	5·9	4·2	314	14	12·4	12·2	290				
·0 ,, ...	12	5·5	2·1	322	1	6·0	6·0	290	26	6·5	4·5	316	24	7·2	5·4	317	10	11·9	11·7	296				
·0 ,, ...	10	5·7	1·4	316					19	6·7	4·3	299	19	8·9	7·3	310	9	8·6	7·1	291				
·5 ,, ...	9	4·8	1·2	143					13	10·8	9·8	279	14	11·0	9·5	276	7	9·7	8·0	263				
·0 ,, ...	7	5·2	3·8	126					9	10·9	9·4	279	12	13·5	12·2	265	7	18·4	16·4	264				

STATION	SAHARSA				TEZPUR												TIRUCHIRAPALLI			
Time in I.S.T.	1430				0230				0730				1100				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	19	2·0	1·3	82	31	1·1	1·0	72	31	1·0	0·5	89	31	1·5	0·9	106	31	1·5	0·6	115	31	3·2	2·8	274
·15 a.g. ...	19	5·9	4·5	82	24	4·4	3·3	73	30	3·5	2·3	91	31	4·1	2·3	95	30	3·9	1·6	108	31	7·8	7·1	272
·6 a.s.l. ...	19	5·2	3·6	94	22	3·8	2·3	100	28	4·6	2·4	96	29	3·8	2·0	105	30	3·6	0·8	117	31	10·4	9·9	269
·0 ,, ...	19	5·3	2·1	132	22	3·6	0·8	135	26	4·4	1·9	113	28	3·5	1·5	168	29	3·3	1·7	228	31	9·3	8·3	269
·5 ,, ...	19	5·6	3·8	252	20	4·3	2·9	240	19	3·0	0·6	223	27	4·6	2·5	233	29	6·0	4·8	244	31	6·3	4·4	279
·0 ,, ...	19	7·3	6·0	268	16	5·5	4·9	244	18	3·7	2·7	256	20	4·8	2·9	252	28	7·7	6·7	244	30	5·2	3·0	3
·5 ,, ...	18	9·1	8·7	278	15	6·3	5·8	247	17	5·0	3·9	254	10	7·3	5·9	256	25	8·1	7·2	247	28	6·9	5·0	27
·0 ,, ...	17	12·1	11·7	280	15	6·6	5·7	253	17	5·6	4·7	253	10	8·9	7·6	256	22	8·1	7·3	249	28	8·3	6·7	38
·0 ,, ...	16	14·0	13·6	288	9	7·6	5·7	268	15	6·8	5·9	259					21	6·7	5·9	258	2	7·3	7·3	50
·0 ,, ...	33	13·4	13·0	281					12	7·4	6·8	258					17	7·2	6·6	256				
·0 ,, ...	11	13·2	12·6	278					11	10·0	8·5	254					16	9·0	8·0	250				
·5 ,, ...	8	10·2	9·6	272					6	12·7	11·7	265					10	12·9	11·4	240				
·0 ,, ...	4	14·9	14·0	256					3	13·5	13·4	234					9	17·6	16·1	247				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MAY 1950

STATION	TIRUCHIRAPALLI								TRIVANDRUM				UDAIPUR											
Time in I.S.T.	0730				1430				0730				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	31	3·5	3·3	278	31	3·2	2·1	279	31	1·8	1·5	329	31	2·3	2·0	238	31	1·5	0·8	237	31	3·2	2·3	
0·15 a. g. ...	31	7·3	7·1	271	31	5·7	4·0	275	29	6·1	5·6	332	31	5·2	4·6	258	31	4·1	3·5	278	31	5·7	4·5	
0·6 a.s l. ...	31	11·9	11·7	275	31	5·8	4·6	271	29	9·6	9·2	309	...	...	...	...	...	...	...	...	...	...	...	
1·0 ,, ...	31	10·3	9·6	283	31	6·3	5·0	272	29	9·6	9·2	308	31	7·5	6·5	270	31	6·2	5·3	262	31	5·2	4·5	
1·5 ,, ...	31	5·8	4·8	300	31	6·1	3·7	290	25	8·5	7·9	309	31	6·6	5·9	281	31	5·9	4·6	272	31	5·1	4·2	
2·0 ,, ...	31	5·3	3·5	353	31	6·0	2·8	329	25	7·4	5·2	327	31	5·3	4·1	291	31	4·6	2·7	268	31	4·4	3·6	
2·5 ,, ...	30	6·4	4·9	29	31	6·6	3·6	5	24	7·6	4·2	13	31	4·8	2·4	308	31	4·4	1·7	266	30	4·1	3·0	
3·0 ,, ...	30	7·5	6·3	34	30	7·6	4·9	28	23	7·4	4·3	35	29	4·7	1·9	315	31	4·5	1·1	277	30	3·9	2·6	
4·0 ,, ...	29	8·2	5·8	34	26	7·6	5·1	29	18	6·7	5·3	46	13	6·0	0·6	307	31	6·2	0·5	12	30	4·8	2·8	
5 0 ,, ...	25	6·1	2·5	356	23	6·8	3·0	337	13	4·3	1·1	349	6	7·7	2·3	328	27	7·1	2·9	291	30	7·4	3·0	
6·0 ,, ...	22	6·6	4·1	271	21	6·9	3·2	288	13	5·3	2·9	259	2	7·3	7·1	255	23	8·3	4·7	319	31	9·1	5·4	
7·5 ,, ...	13	6·0	4·6	246	15	6·2	4·3	245	10	5·2	3·4	230					16	13·4	7·8	318	29	12·0	8·1	
9·0 ,, ...	12	5·2	3·5	224	10	6·0	4·0	249	8	2·9	1·5	190					13	13·6	10·8	289	22	14·5	9·6	

STATION	VENGURLA												VERAVAL											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	31	1·2	0·8	296	31	0·6	0·3	348	31	4·6	4·5	266	31	5·9	4·3	270	31	3·8	2·7	275	31	6·9	6·0	
0·15 a. g. ...	31	4·2	3·1	310	31	3·2	2·0	336	31	6·3	5·9	273	31	7·5	6·3	281	31	6·9	5·2	280	31	8·1	7·3	
0·6 a.s.l. ...	31	5·4	4·2	310	31	4·7	4·0	308	31	5·8	5·3	303	26	10·1	8·8	289	27	9·7	7·7	295	31	8·4	7·3	
1·0 ,, ...	28	6·9	5·7	320	30	6·0	4·9	321	30	6·5	5·5	323	25	9·2	7·4	283	21	9·8	7·6	301	31	7·7	6·4	
1·5 ,, ...	21	8·3	6·7	329	27	7·9	6·1	329	29	6·9	5·4	336	19	7·1	5·6	297	16	7·1	5·0	291	30	6·3	4·4	
2·0 ,, ...	20	6·3	4·0	330	27	7·1	4·7	328	26	6·2	4·0	338	15	5·5	2·9	291	13	5·6	2·6	281	29	4·6	2·4	
2·5 ,, ...	13	4·5	2·2	336	25	5·4	2·7	6	24	5·4	1·5	348	9	4·7	2·4	259	11	5·8	2·9	314	29	4·9	1·9	
3·0 ,, ...	13	4·3	1·5	89	23	5·6	2·8	55	23	5·1	0·8	122	8	5·4	2·8	254	10	6·6	2·9	314	28	5·6	1·9	
4·0 ,, ...	5	5·3	3·1	113	18	5·9	4·6	87	20	5·2	3·7	116	4	4·6	3·7	2	7	6·1	3·7	209	28	6·4	1·5	
5·0 ,, ...	2	3·7	1·3	180	14	6·2	4·6	33	19	5·5	2·6	67					7	6·4	3·7	248	28	7·6	2·7	
6·0 ,, ...	2	4·5	1·0	6	12	6·1	4·2	344	19	6·3	2·9	30					6	8·4	4·1	254	23	8·1	3·4	
7·5 ,, ...					10	7·7	4·9	298	15	7·4	3·9	302					3	10·3	9·9	284	15	9·5	6·4	
9·0 ,, ...					7	9·3	6·3	243	11	4·0	2·0	338					3	14·7	14·5	286	11	10·3	7·7	

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

MAY 1950

STATION	VISAKHAPATNAM												MINICOY											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·1	1·7	190	31	2·5	1·7	216	31	5·3	4·4	193	31	5·0	4·7	284	31	4·7	4·3	285	31	4·9	4·5	295
1·5 a. g. ...	31	5·3	3·7	223	31	4·8	3·2	239	31	6·8	4·9	195	29	6·1	5·8	292	30	6·7	6·2	292	30	6·7	6·2	293
3·6 a.s.l. ...	28	6·7	4·3	237	30	7·7	5·3	240	31	5·1	2·5	235	28	6·2	5·9	290	30	6·7	6·3	291	29	6·7	6·5	294
0 ,, ...	25	6·6	2·7	253	28	7·0	4·5	250	31	4·9	2·2	292	27	5·4	4·9	284	29	6·2	5·8	290	26	6·3	5·9	289
5 ,, ...	23	5·0	2·3	280	25	5·1	2·5	284	31	5·8	3·3	338	24	5·0	3·4	293	26	4·4	2·8	310	25	6·1	5·0	290
0 ,, ...	19	4·4	2·6	347	23	4·6	3·0	327	30	5·8	4·1	3	23	4·8	2·5	355	25	5·0	2·8	359	25	5·6	2·8	326
5 ,, ...	15	4·5	3·4	4	23	4·5	3·3	354	29	5·4	4·0	19	20	5·3	2·1	20	22	5·9	3·6	31	25	6·3	3·0	26
0 ,, ...	12	6·1	4·9	27	21	6·1	4·8	14	29	5·5	4·4	28	20	6·4	3·1	60	21	6·9	4·0	58	25	7·8	3·7	50
0 ,, ...	2	4·3	2·3	23	17	7·1	5·6	23	28	6·1	4·9	31	14	7·0	4·6	83	20	6·1	3·2	61	22	6·6	3·5	56
0 ,, ...					15	7·1	5·2	13	25	5·5	3·8	35	6	6·5	4·6	253	19	5·7	1·1	307	21	5·9	2·3	302
0 ,, ...					12	5·8	2·2	14	17	5·2	2·3	288	4	7·7	4·2	239	18	5·3	1·3	281	20	6·7	5·3	279
5 ,, ...					7	8·5	5·9	260	12	9·0	6·9	255					16	5·0	4·1	247	15	5·1	2·9	235
0 ,, ...					5	8·4	7·0	259	10	7·7	6·2	238					14	3·4	1·0	233	10	3·8	2·2	206

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

MAY 1950

Height in Km.	n	V	v	D
		AHMEDABAD		
10	46	15·6	11·9	280
11	39	16·9	13·8	270
12	35	17·6	14·2	265
13	29	17·2	14·7	267
14	25	15·3	13·5	256
15	19	14·9	11·3	258
16	16	12·9	9·0	261
17	13	13·9	8·9	268
18	12	14·0	6·9	261
19	11	15·3	6·5	268
20	9	14·0	2·1	280
21	7	17·6	4·9	285
22	6	13·7	2·7	211
23	4	12·1	2·3	136
24	4	12·1	3·5	250
25	4	21·4	12·0	281
26	3	24·2	7·0	257
27	2	23·5	7·9	293
28	1	19·0	19·0	219
		ALLAHABAD		
10	16	18·1	16·4	277
11	13	18·7	16·9	280
12	7	21·1	18·9	284
13	5	25·3	24·0	277
14	3	8·7	7·5	285
15	3	6·7	5·0	288
16	2	8·7	8·5	292
17	2	6·7	1·7	242
18	2	3·7	3·5	336
19	2	10·5	8·5	97
20	2	7·7	7·7	103
21	2	6·0	5·8	81
22	2	6·5	5·0	59
23	1	2·5	2·5	360
24	1	4·0	4·0	20
25	1	6·5	6·5	80
26	1	7·0	7·0	105
27	1	5·5	5·5	85
28	1	4·5	4·5	170
		AMBALA		
10	11	17·9	14·5	308
11	8	19·1	17·5	306
12	7	23·1	21·7	298
13	5	22·6	21·9	288
14	4	19·4	19·1	304
15	3	20·3	19·0	292
16	3	19·0	17·5	295
17	3	17·7	17·2	285
18	3	16·7	15·3	286
19	3	17·3	16·6	278
20	2	21·5	20·9	266
		ANANTAPUR		
10	24	8·0	2·6	224
11	16	7·5	3·4	150
12	12	7·3	1·6	148
13	11	7·0	3·4	131
14	10	9·7	5·9	132
15	8	11·5	7·9	106
16	5	13·1	11·0	98
17	2	18·0	17·7	97
18	2	16·3	15·9	109
19	1	15·0	15·0	95
		ASANSOL		
10	9	15·4	13·8	270
11	7	13·4	12·4	270
12	6	14·6	13·5	275
13	6	16·1	14·3	274
14	4	19·3	15·3	275
15	3	23·2	21·4	302
16	2	29·7	28·3	316
17	2	34·0	31·8	324
		BANGALORE		
10	21	6·5	1·3	186
11	8	6·1	4·2	83
12	5	8·4	0·6	96
13	5	8·9	7·6	96
14	4	8·4	7·5	91
15	4	11·9	10·7	96
16	4	14·0	13·1	95
17	2	18·3	16·1	95
18	1	31·5	31·5	75
19	1	47·5	47·5	75
20	1	40·5	40·5	80
21	1	39·0	39·0	80
		BAREILLY		
10	13	16·3	13·9	301
11	11	21·2	18·4	299
12	7	24·9	22·1	300
13	5	35·1	31·9	293
14	4	30·6	27·3	283
15	4	31·0	27·5	280
16	3	15·2	11·8	304
17	2	22·0	21·8	293
18	2	20·0	19·9	292
19	2	14·3	14·3	289
20	2	12·3	11·7	319
21	2	11·7	10·4	99
22	2	9·3	9·1	282
23	2	10·7	10·3	260
24	2	15·3	11·1	278
25	2	9·3	7·5	49
26	2	14·0	14·0	113
27	2	11·0	7·5	67
28	2	15·3	7·6	6
29	1	23·0	23·0	330
		BHOPAL		
10	20	16·3	14·9	279
11	16	15·4	13·3	276
12	12	13·1	12·3	206
13	11	11·5	11·0	261
14	10	9·5	9·1	266
15	9	8·9	7·4	260
16	7	6·9	2·2	292
17	6	10·8	2·4	238
18	4	11·5	6·5	264
19	3	5·0	2·3	290
20	2	9·3	7·7	286
21	2	11·5	11·3	293
22	1	14·0	14·0	304
23	1	13·0	13·0	294
24	1	16·0	16·0	300
		BHUJ		
10	22	15·5	12·8	286
11	21	15·6	13·8	281
12	16	15·2	14·4	276
13	13	13·4	12·4	272
14	10	9·7	8·4	260
15	10	9·3	7·7	2
16	8	9·6	7·3	2
17	5	9·0	5·1	2
18	5	12·0	6·0	2
19	3	12·2	4·3	3
20	2	19·7	14·1	3
		BIKANER		
10	10	20·3	18·9	3
11	5	20·4	19·3	2
12	3	37·1	36·7	3
13	2	34·5	34·5	3
14	2	31·0	30·9	
15	2	29·0	28·3	
16	1	21·0	21·0	
		BOMBAY		
10	18	15·0	11·6	
11	11	10·9	7·9	
12	8	6·3	5·3	
13	7	6·4	3·8	
14	7	7·3	4·9	
15	7	8·1	4·7	
16	7	10·0	4·3	
17	6	12·3	7·3	
18	4	12·4	10·5	
19	2	17·5	17·0	
20	2	15·7	15·7	
21	1	14·0	14·0	
22	1	16·0	16·0	
23	1	18·0	18·0	
24	1	5·0	5·0	
25	1	12·0	12·0	
26	1	20·0	20·0	
27	1	24·5	24·5	
28	1	33·0	33·0	
29	1	18·0	18·0	
30	1	18·0	18·0	
31	1	20·5	20·5	
32	1	25·5	25·5	
33	1	32·0	32·0	
34	1	22·0	22·0	

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

MAY 1950

ght in km.	n	V	v	D	Height in Km.	n	V	v	D	Height in Km.	n	V	v	D	Height in Km.	n	V	v	D
		CALCUTTA				CUTTACK (Contd.)					GADAG (Contd.)					JAGDALPUR (Contd.)			
10	6	18·4	16·4	262	24	2	27·0	19·5	215	23	1	20·0	20·0	85	20	3	12·5	10·4	104
11	3	11·5	8·2	260	25	1	57·5	57·5	235	24	1	19·5	19·5	80	21	2	4·5	4·3	102
12	2	10·7	9·4	248	26	1	90·0	90·0	220	25	1	17·0	17·0	85	22	1	1·0	1·0	50
13	1	10·5	10·5	310			DEOLALI			26	1	16·0	16·0	85	23	1	1·0	1·0	175
14	1	9·5	9·5	305	10	13	12·9	10·0	288	27	1	15·5	15·5	80	24	1	1·5	1·5	255
		COCHIN (Willingdon Island)			11	12	10·4	8·6	296	28	1	17·5	17·5	75			JAMSHEDPUR		
10	6	3·9	1·3	101	12	11	8·3	6·9	297	29	1	19·0	19·0	85	10	16	14·3	13·1	255
11	6	5·7	2·1	65	13	11	6·9	5·7	289	30	1	19·0	19·0	105	11	12	11·9	10·8	249
12	5	9·1	6·1	70	14	10	4·3	1·2	209			GAYA			12	11	11·6	10·6	251
13	5	9·7	9·1	85	15	8	6·0	2·8	192	10	5	15·0	12·3	270	13	10	10·9	9·8	247
14	4	11·9	8·7	87	16	7	8·0	7·2	133	11	1	9·5	9·5	246	14	9	7·6	6·8	255
15	4	10·0	7·7	74	17	6	15·0	4·9	114			GOPALPUR			15	8	4·1	2·2	242
16	3	19·2	18·7	80	18	5	13·8	13·6	103	10	13	9·0	6·3	239	16	7	4·1	1·1	76
17	3	21·5	21·5	92	19	3	15·8	6·1	126	11	7	8·1	5·7	257	17	6	7·0	6·2	82
18	3	23·3	23·2	85	20	3	15·8	15·8	85	12	4	7·2	4·1	288	18	4	11·3	9·7	100
19	3	23·5	23·0	95	21	3	18·8	18·3	84	13	3	4·5	0·6	86	19	3	10·8	9·6	80
20	2	19·3	19·2	105	22	1	23·5	23·5	90	14	3	9·0	6·3	128	20	1	5·0	5·0	75
21	2	16·3	16·1	109	23	1	24·0	24·0	95	15	1	7·0	7·0	165	21	1	14·0	14·0	95
22	1	24·0	24·0	105	24	1	20·0	20·0	100			GORAKHPUR			22	1	8·0	8·0	50
		COOCH BEHAR			25	1	19·0	19·0	85	10	10	17·7	15·9	284	23	1	11·0	11·0	70
10	8	22·2	21·4	242			DIBRUGARH			11	7	20·5	19·4	290	24	1	8·0	8·0	90
11	6	12·2	12·2	250	10	7	20·1	19·3	293	12	2	24·3	23·4	298	25	1	14·5	14·5	115
12	3	16·7	16·5	253	11	5	23·8	22·4	290			HYDERABAD (Dn.)					JHARSUGUDA		
13	3	13·0	12·9	247	12	2	22·0	21·0	290	10	18	9·7	6·3	267	10	23	10·0	7·9	244
14	2	18·5	18·5	244	13	1	19·5	19·5	300	11	12	9·7	5·4	266	11	15	8·5	6·4	247
15	1	19·5	19·5	250	14	1	19·0	19·0	295	12	9	7·1	2·7	293	12	12	8·2	6·5	246
16	1	24·0	24·0	260	15	1	19·0	19·0	315	13	8	7·4	0·8	281	13	11	7·7	5·5	220
		CUTTACK			16	1	12·5	12·5	300	14	5	8·0	3·0	85	14	10	6·7	4·2	235
10	19	12·1	10·4	246			GADAG			15	5	9·2	7·1	104	15	7	6·1	1·1	115
11	16	8·1	6·5	247	10	20	8·8	3·7	254	16	3	11·3	10·8	113	16	6	8·4	2·7	45
12	16	8·1	5·0	251	11	12	7·1	2·9	291	17	2	10·7	8·5	71	17	5	10·8	5·2	75
13	16	6·3	2·7	225	12	11	7·5	1·4	61			JAGDALPUR			18	4	7·4	5·9	93
14	15	5·9	1·4	112	13	9	6·5	4·4	87	10	24	9·9	6·1	246	19	3	7·7	6·7	158
15	14	6·5	3·9	88	14	8	7·7	5·5	104	11	21	9·8	6·9	237	20	1	13·0	13·0	250
16	13	8·8	5·3	60	15	7	9·1	8·9	110	12	18	7·9	5·2	222	21	1	26·0	26·0	225
17	10	12·3	6·3	53	16	5	12·2	12·0	99	13	17	7·1	1·5	199	22	1	33·0	33·0	220
18	10	14·3	7·0	51	17	4	13·9	13·3	95	14	14	7·6	2·8	128			JODHPUR		
19	7	17·4	7·9	76	18	3	15·8	15·8	93	15	14	10·3	5·6	108	10	18	20·4	14·9	300
20	5	16·3	7·9	92	19	2	21·5	21·5	93	16	10	10·7	6·3	90	11	16	21·4	18·1	287
21	4	17·9	4·1	20	20	1	13·0	13·0	79	17	8	10·3	8·0	92	12	13	22·3	20·1	288
22	3	22·8	8·2	275	21	1	15·0	15·0	85	18	6	15·7	13·8	87	13	8	23·4	21·8	295
23	2	19·3	12·7	210	22	1	18·5	18·5	85	19	4	15·4	12·1	80	14	6	22·9	22·0	291

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level.

MAY 1950

Height in Km.	n	V	v	D
		JODHPUR *(Contd.)*		
15	5	23·8	23·2	284
16	5	24·2	23·2	279
17	5	23·2	20·8	275
18	5	22·0	21·3	277
19	5	17·2	16·8	270
20	5	17·9	17·3	273
21	5	16·8	15·6	280
22	5	17·9	13·3	292
23	4	14·6	14·4	240
24	3	16·5	14·6	284
25	3	18·3	14·1	293
26	2	20·3	16·1	300
27	2	23·5	11·8	253
28	1	10·5	10·5	165
29	1	5·0	5·0	220
30	1	21·0	21·0	265
31	1	28·0	28·0	255
		JABALPUR		
10	16	14·9	14·1	291
11	11	14·7	13·6	289
12	9	10·7	8·6	275
13	6	7·6	7·3	255
14	4	7·4	6·7	252
15	4	6·4	4·0	247
16	3	3·5	2·7	87
17	3	7·3	6·0	73
18	2	10·5	4·3	45
		MADHOSAGAR		
10	12	18·7	16·9	295
11	7	18·0	17·2	305
12	5	17·1	16·9	302
13	5	16·0	15·7	293
14	5	15·6	15·4	285
15	3	17·5	17·5	285
16	3	18·8	17·9	274
17	2	12·0	11·5	279
18	2	15·0	14·9	283
19	2	11·5	11·5	282
20	1	6·0	6·0	295
21	1	11·0	11·0	320
22	1	10·5	10·5	340
23	1	5·0	5·0	310
24	1	4·5	4·5	275
25	1	4·5	4·5	270
26	1	3·0	3·0	275
27	1	4·5	4·5	265
		MADRAS		
10	31	5·5	2·1	236
11	23	4·7	1·9	128
12	20	5·9	4·0	106
13	16	7·0	5·7	95
14	14	10·0	7·6	97
15	10	15·6	14·9	91
16	7	16·1	15·1	97
17	6	15·3	13·9	103
18	5	18·3	12·1	116
19	4	20·1	16·1	105
20	3	27·8	21·2	95
21	3	27·8	20·1	120
22	1	38·5	38·5	80
		MALEGAON		
10	26	12·7	8·8	264
11	18	9·4	7·3	280
12	14	6·1	3·8	296
13	12	6·2	3·4	269
14	12	5·5	2·1	241
15	11	6·9	0·8	196
16	9	8·1	7·0	114
17	9	11·6	3·8	106
18	9	13·3	12·8	89
19	7	14·6	10·1	76
20	6	15·7	11·8	81
21	4	21·1	13·9	9
22	2	16·0	2·0	6
23	2	25·7	7·3	249
24	1	52·0	52·0	290
25	1	46·0	46·0	275
		MANGALORE		
10	13	5·5	1·7	61
11	11	6·0	2·7	70
12	8	7·9	5·0	87
13	5	8·6	7·1	102
14	5	8·7	8·4	95
15	1	14·0	14·0	95
16	1	16·5	16·5	80
17	1	26·0	26·0	100
18	1	18·5	18·5	100
19	1	13·5	13·5	80
20	1	20·5	20·5	100
21	1	28·0	28·0	80
		MASULIPATAM		
10	22	6·7	1·2	242
11	17	7·4	3·0	266
12	17	7·0	1·3	282
13	13	6·3	2·6	84
14	12	4·8	4·0	99
15	11	7·8	7·0	101
16	9	11·3	9·8	96
17	9	14·3	12·5	95
18	7	18·9	18·7	89
19	6	18·7	18·5	88
20	5	20·9	20·4	83
		NAGERCOIL		
10	28	5·3	2·0	215
11	29	6·2	1·6	173
12	15	5·3	1·5	247
13	13	5·4	1·1	164
14	12	7·0	4·5	138
15	12	7·9	5·7	114
16	6	9·7	9·1	92
17	5	14·9	14·4	97
18	4	17·9	16·9	106
19	3	18·3	17·2	92
20	3	23·8	23·2	91
21	3	26·8	25·7	87
22	3	28·8	28·7	89
23	3	21·8	21·8	91
24	1	28·0	28·0	85
25	1	37·5	37·5	95
26	1	51·0	51·0	95
27	1	73·0	73·0	85
28	1	40·5	40·5	125
		NAGPUR		
10	14	14·9	12·6	287
11	10	14·7	12·9	288
12	9	12·2	10·3	286
13	7	14·7	9·3	
14	4	5·3	1·6	
15	4	7·6	2·9	
16	2	9·0	5·1	
17	1	13·0	13·0	
		NEW DELHI		
10	14	16·9	14·7	
11	11	19·3	17·2	
12	6	23·7	22·2	
13	2	20·3	19·9	
		POONA		
10	21	9·1	6·5	
11	15	7·5	5·7	
12	12	5·5	2·0	
13	5	5·3	1·3	
14	3	3·8	2·0	
15	3	4·3	3·0	
16	1	10·5	10·5	
		PORT BLAIR		
10	14	5·6	4·4	
11	11	7·3	6·9	
12	10	9·7	9·4	
13	8	10·8	10·1	
14	8	14·8	13·6	
15	6	19·7	19·3	
16	4	19·3	19·0	
17	3	21·7	21·3	
18	2	20·0	19·1	
19	1	27·0	27·0	
20	1	29·0	29·0	
21	1	29·5	29·5	
22	1	30·0	30·0	
		RAIPUR		
10	14	11·9	8·9	
11	11	9·6	7·0	
12	8	7·5	5·3	
13	7	4·7	2·3	
14	7	4·3	1·0	
15	6	4·5	3·9	
16	3	5·5	4·2	
17	3	8·7	8·6	
18	3	10·5	9·5	

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level.

MAY 1950.

Height in Km.	n	V	v	D
	RAIPUR *(Contd.)*			
19	2	13·7	12·5	101
20	1	12·0	12·0	60
21	1	15·0	15·0	65
22	1	8·0	8·0	10
	SAHARSA			
10	8	18·9	17·3	262
11	8	17·5	16·2	257
12	5	17·4	16·1	253
13	5	15·6	14·0	266
14	4	10·3	9·5	267
15	4	4·5	4·3	286
16	4	8·0	5·0	271
17	3	11·0	3·6	290
18	3	18·0	7·3	259
19	2	23·0	23·0	255
20	1	18·0	18·0	245
21	1	14·0	14·0	240
	TEZPUR			
10	10	22·5	19·0	251
11	7	23·9	20·2	251
12	5	24·6	23·0	275
13	5	22·8	21·0	277
14	3	24·8	23·9	263
15	3	29·7	28·7	281
16	2	13·3	13·1	303
17	1	18·0	18·0	305
18	1	15·5	15·5	295
19	1	13·5	13·5	335
20	1	11·0	11·0	305
21	1	5·0	5·0	310
22	1	10·5	10·5	80
23	1	11·0	11·0	95
24	1	10·0	10·0	125
	TIRUCHIRAPALLI			
10	21	4·5	2·1	225
11	11	4·3	1·3	145
12	10	6·1	5·2	97
13	10	8·9	7·5	100
14	9	12·5	8·7	96
15	7	13·1	12·0	91
16	4	15·7	15·6	88
17	3	22·1	21·5	83

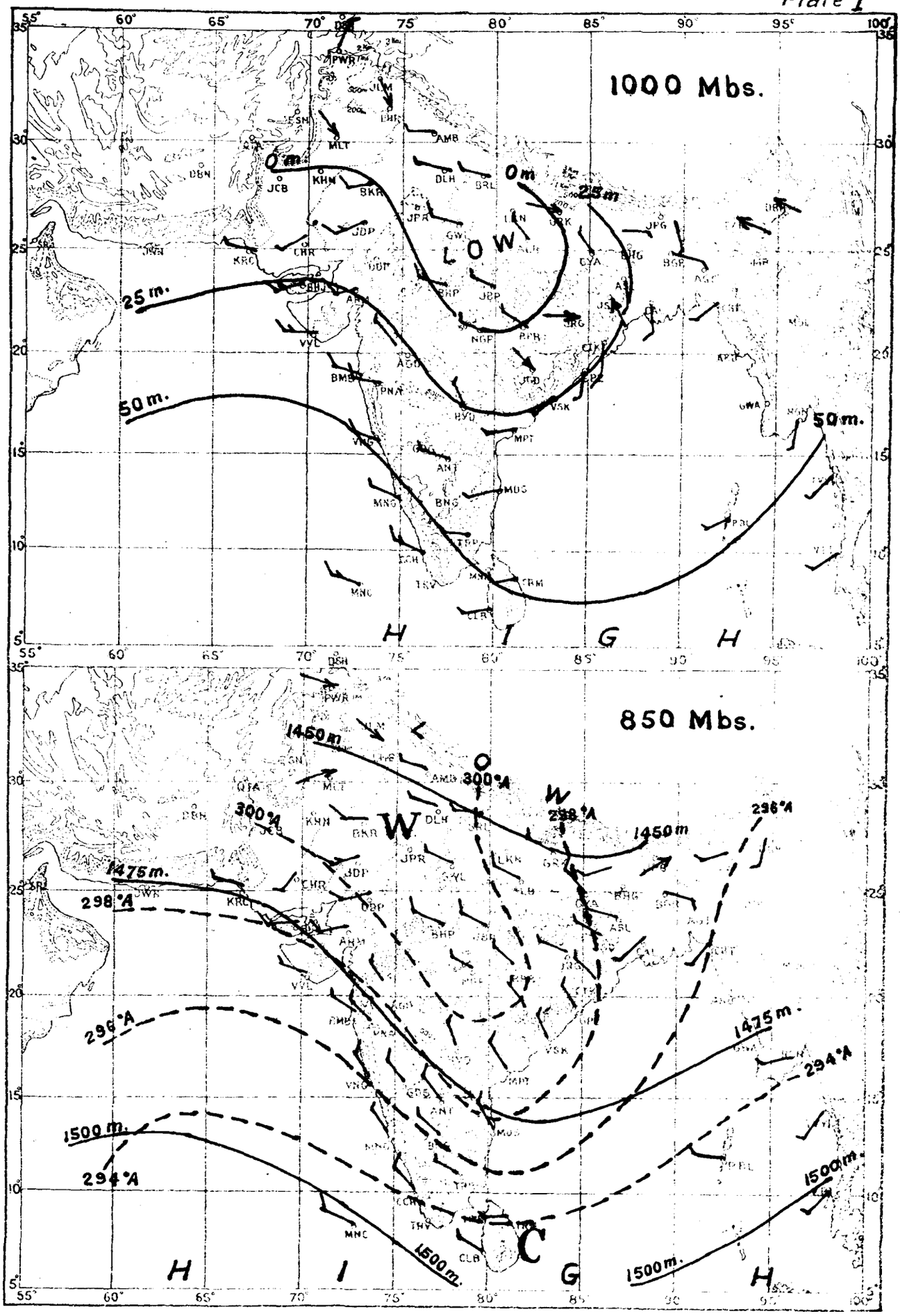
Height in Km.	n	V	v	D
	TIRUCHIRAPALLI *(Contd.)*			
18	2	27·0	27·0	88
19	2	30·0	28·3	98
20	1	27·0	27·0	110
	TRIVANDRUM			
10	5	5·2	2·5	170
11	3	3·2	1·9	157
	UDAIPUR			
10	29	16·5	13·5	283
11	20	21·0	18·3	284
12	16	22·7	21·9	274
13	15	21·9	20·5	272
14	14	19·0	18·0	271
15	13	15·7	15·0	261
16	12	15·3	14·7	266
17	8	10·1	7·9	267
18	6	10·4	5·3	279
19	3	9·5	5·0	308
20	3	8·5	3·2	258
21	2	12·0	7·4	350
22	2	16·7	11·2	1
23	2	21·5	13·8	355
24	2	13·0	5·0	22
25	2	12·2	4·5	12
26	2	14·5	6·9	11
27	1	21·0	21·0	335
28	1	23·0	23·0	335
	VENGURLA			
10	15	4·7	3·0	18
11	14	5·4	1·9	15
12	12	6·3	2·3	63
13	9	6·5	3·8	79
14	4	9·3	9·2	86
15	2	12·3	12·3	105
16	2	20·7	20·7	85
17	1	21·0	21·0	105
	VERAVAL			
10	12	13·7	12·3	290
11	11	11·1	10·9	283
12	11	8·1	7·9	276
13	9	6·1	5·3	266
14	9	5·9	4·5	207
15	9	5·7	3·9	189

Height in Km.	n	V	v	D
	VERAVAL *(Contd.)*			
16	7	7·5	5·3	149
17	6	9·3	8·3	111
18	4	9·4	8·2	94
19	1	5·5	5·5	110
20	1	10·0	10·0	185
21	1	11·0	11·0	190
22	1	15·5	15·5	210
23	1	17·0	17·0	265
24	1	31·0	31·0	266
	VISAKHAPATNAM			
10	12	7·0	4·5	264
11	10	7·9	6·2	253
12	8	4·3	1·4	317
13	6	4·7	1·3	81
14	4	5·0	4·4	301
15	3	8·8	8·3	87
16	3	13·5	13·4	73
17	3	19·0	18·9	1
18	2	22·5	22·3	87
19	1	20·0	20·0	100
	MINICOY			
10	24	4·3	1·5	196
11	21	5·6	2·1	223
12	17	7·5	5·2	95
13	11	8·5	7·8	95
14	7	9·1	7·7	101
15	4	10·7	10·6	103
16	2	14·3	14·3	105
17	1	21·0	21·0	85
18	1	17·5	17·5	90

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

MAY 1950

Plate I



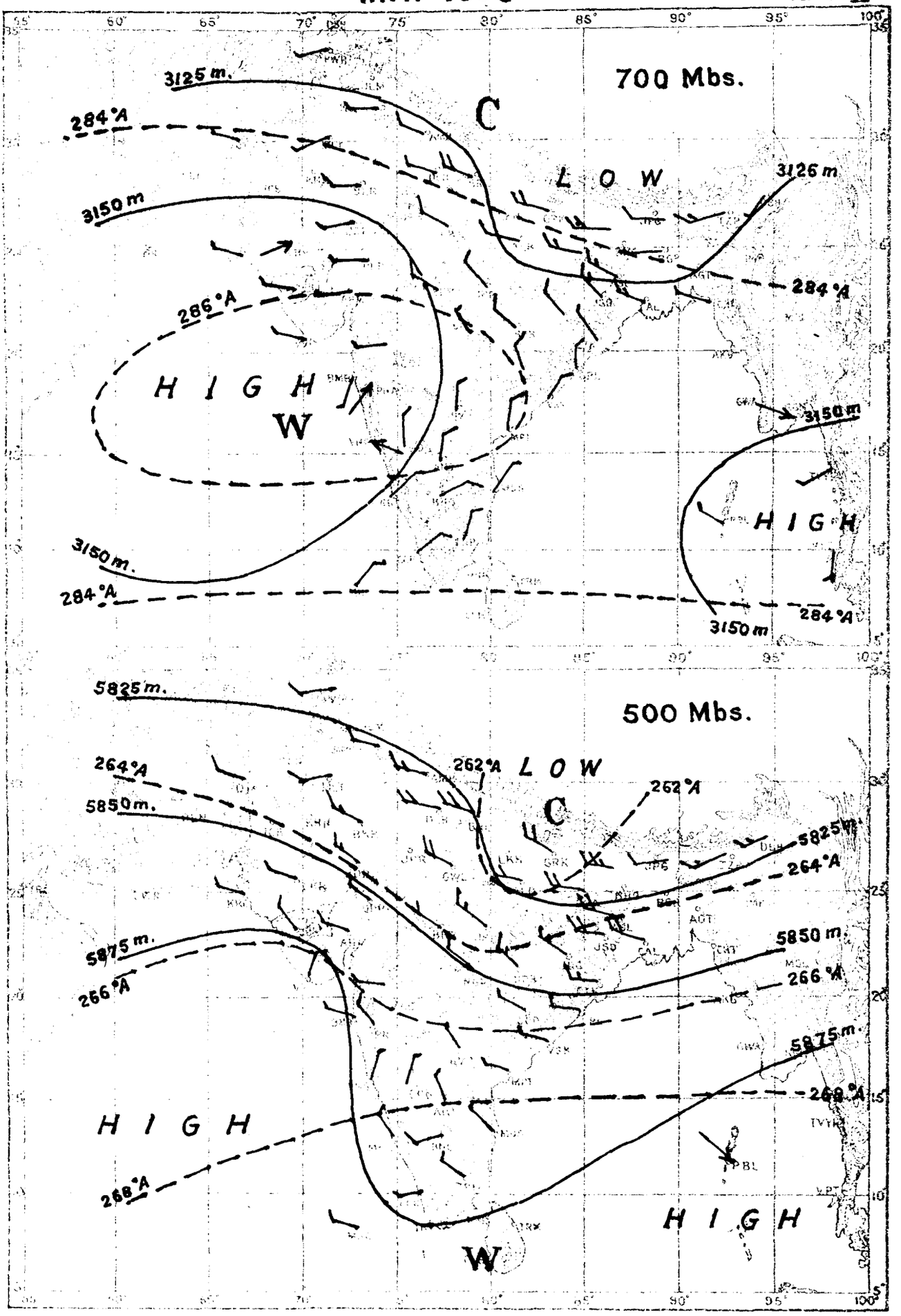
RESULTANT WIND —— = 5 Knots, ------ = 10 Knots, —— = 50 Knots.

- - - - - Isotherms in degrees absolute. ——— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

MAY 1950

Plate II



RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

- - - - Isotherms in degrees absolute. ——— Contours in geopotential metres.

G. P. Z. P. POONA, 53.

Registered No. B-3097

INDIA WEATHER REVIEW, 1950

MONTHLY WEATHER REPORT

JUNE

Published by authority of the Government of India

CHIEF FEATURES:—(i) A cyclonic storm from the Bay of Bengal which caused considerable havoc in sub-Himalayan West Bengal and (ii) feeble activity of the Arabian Sea branch of the monsoon.

The monsoon which had advanced upto Mangalore by the end of May, continued strong over Travancore-Cochin and Malabar-South Kanara during the first four days of June. The monsoon also extended into the south Konkan and Mysore by the 3rd. After the 5th June, however, it weakened over these regions.

A fresh strengthening of the Arabian Sea branch on the 9th carried the monsoon along the west coast upto Surat by the 12th. It also extended feebly into the Deccan (Desh) and Madhya Pradesh on the 15th. However, after the 16th, this branch of the monsoon became weak and continued so till the end of the month. Consequently most of the Peninsula, the central parts of the country, Gujarat and Saurashtra and Kutch had little rain during June.

The Bay of Bengal branch of the monsoon which had advanced into the southeast Bay and the Andaman Sea by the 22nd May did not reach northeast India till the 2nd week of June.

Weather became unsettled in the north Bay of Bengal on the 8th morning and a depression formed there on the next day with its centre at 0830 hrs. I.S.T. near Lat. 19½°N., Long. 89½°E. Moving northwards, the depression intensified rapidly into a cyclonic storm by the 10th morning and crossed the coast east of Saugor Island on the same afternoon. It then weakened into a deep depression and lay with its centre about 30 miles northeast of Jamshedpur on the 11th morning. Moving northnorthwestwards and weakening at the same time, it broke up against the Nepal hills by the 13th. The cyclonic storm ushered in the monsoon into West Bengal on the 11th and over the rest of northeast India and over Eastern Pakistan by the next day. The moist air brought into the interior of the country by the storm was responsible for fairly widespread thundershowers in Madhya Pradesh and local thundershowers in east Uttar Pradesh between the 12th and the 14th.

In association with the storm, rainfall was very heavy in sub-Himalayan West Bengal and east Bihar between the 12th and 14th. Some noteworthy rainfall amounts reported during the period, 11th to 13th June, were : Midnapore 10·9″ on the 11th, Kurseong 20·8″, Darjeeling 17·9″, Jalpaiguri 11·2″ and Purnea 10·3″ on the 12th and Kurseong 17·0″, Darjeeling 10·2″ and Cooch Behar 7·2″ of rain on the 13th. These heavy downpours caused heavy landslides in Darjeeling, Kalimpong and Kurseong towns and the adjoining regions. Nearly one hundred people were killed and several injured as a result of the landslides in the Darjeeling district. A large number of houses was destroyed and the electric and water supply systems were disrupted in Darjeeling which was completely cut off from the rest of the country for a number of days. Vast areas in Midnapore, Cooch Behar and Jalpaiguri were submerged when the three rivers, the Mayurakshi, the Cossye and the Tista suddenly overflowed their banks. At least 25 persons are reported to have perished in the floods and over a thousand cattle were carried away in the Jalpaiguri district alone. Most parts of the town of Jalpaiguri, where the flood water of the Tista rose to a record height, were submerged under water for a number of days and food and other necessities of daily life had to be dropped from air for the stricken citizens of that town. Losses in property alone in these regions were estimated at several lakhs of rupees.

Even after the cyclonic storm had become unimportant, the monsoon continued active in northeast India till the 16th. It weakened over most of this region between the 16th and 22nd. Conditions became markedly unsettled in the north Bay of Bengal on the 22nd evening and a shallow depression formed there next morning with its centre near

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Lat. 20½°N. , Long. 89°E. Moving northwestwards, the shallow depression crossed the coast near Saugor Island the sam night and lay as a low pressure area over Gangetic West Bengal and the neighbourhood on the 24th and over south Biha Chota Nagpur and the adjoining regions by the 25th. It persisted there till the 29th when it became unimportant. Und the influence of the depression and its subsequent movement as a low pressure area, the monsoon revived in northeast Ind and Eastern Pakistan on the 22nd and extended into east Uttar Pradesh on the 26th. The monsoon continued to b active over these divisions till the end of June.

Two western disturbances affected the country during the month. The first disturbance which moved from sout Baluchistan to the hills of the Punjab (I) between the 1st and 3rd, was feeble and caused only local thundershowers in wes Rajasthan on the 2nd and 3rd. The second western disturbance moved across the extreme north of the country in th middle of the third week. Under its influence local thunderstormrain occurred in and near the hills of the Punjab (I) an of west Uttar Pradesh between the 20th and 22nd.

The total rainfall of the month was in moderate to large excess in West Bengal, Chota Nagpur and Bihar and i slight excess in Orissa and Rayalaseema. It was normal in Assam, east Uttar Pradesh and Malabar and South Kanara and i slight defect in Travancore-Cochin. Elsewhere it was in moderate to large defect. Averaged over the plains of India, th month's rainfall was 21% in defect.

The mean maximum temperature was above normal in the Punjab (I), Vindhya Pradesh and west Madhya Prades and below normal in Chota Nagpur and Rayalaseema. Elsewhere it was normal. The mean minimum temperature wa above normal in the Punjab (I) and normal elsewhere.

The mean relative humidity was in excess in Bihar and normal elsewhere.

Cloud amount was above normal in Chota Nagpur, Bihar, east Uttar Pradesh, east Madhya Pradesh, south Hydera bad, Rayalaseema and Tamilnad and below normal in the Punjab (I) and Rajasthan. Elsewhere it was normal.

Data from Jammu and Kashmir are incomplete.

Table I contains the divisional and sub-divisional means of rainfall, temperature, humidity and cloud amount for the 13 chief political divisions and the 28 sub-divisions. The stations whose observations are used for preparin these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within th 24 hours ending at 8·30 hours I.S.T. of the date noted in the succeeding column; similarly the heaviest fall in 24 hours fo any station denotes the amount recorded during the 24 hours ending at 8·30 hours I. S. T. of the date given in th succeeding column.

POONA 5,
dated the 8th October, 1950

C. RAMASWAMY,
for Director General of Observatori

	Rainfall				Departure from normal of				
							0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"	"	"		°	°	mb.	%	
Assam (including Manipur and Tripura)	16·41	15·50	+0·91	+ 6	−0·9	−0·1	+0·3	+5	+0·9
West Bengal ...	17·93	12·77	+5·16	+ 40	−0·9	+0·2	+0·1	+3	+0·3
Orissa ...	10·08	8·45	+1·63	+ 19	−1·0	−0·5	+0·1	+5	+1·0
Bihar ...	12·80	7·32	+5·48	+ 75	−1·9	−0·5	+1·4	+7	+1·4
Uttar Pradesh...	3·90	4·88	−0·98	− 20	0	+0·4	−0·2	+1	+0·5
Punjab(I)(including PEPSU and Delhi) ...	0·38	2·40	−2·02	− 84	+2·7	+2·1	0	−2	−1·1
Rajasthan ...	0·70	2·24	−1·54	− 69	+0·9	+0·4	−0·9	−1	−0·7
Sub-Division									
Bay Islands ...	14·57	21·75	−7·18	− 33	−0·6	+1·5	−1·2	+3	+0·9
Assam (including Manipur and Tripura)	16·41	15·50	+0·91	+ 6	−0·9	−0·1	+0·3	+5	+0·9
West Bengal ..	17·93	12·77	+5·16	+ 40	−0·9	+0·2	+0·1	+3	+0·3
Orissa ...	10·08	8·45	+1·63	+ 19	−1·0	−0·5	+0·1	+5	+1·0
Chota Nagpur ...	11·52	7·65	+3·87	+ 51	−2·1	−0·5	+1·2	+5	+1·4
Bihar ...	13·43	7·15	+6·28	+ 88	−1·7	−0·4	+1·5	+8	+1·5
Uttar Pradesh, East ...	5·43	5·22	+0·21	+ 4	−0·8	+0·2	0	+3	+0·9
Uttar Pradesh, West ...	2·37	4·54	−2·17	− 48	+0·9	+0·7	−0·4	−1	+0·1
Punjab (I) (including PEPSU and Delhi)	0·38	2·40	−2·02	− 84	+2·7	+2·1	0	−2	−1·1
Jammu and Kashmir	...	...	Data	incom	plete	...	...	...	...
Rajasthan, West	0·36	1·53	−1·17	− 76	+0·7	−0·1	+0·7	+1	−0·5
Rajasthan, East, (including Ajmer)	1·04	3·96	−1·92	− 65	+1·1	+0·9	−2·3	−3	−0·9
Madhya Bharat	1·51	5·72	−4·21	− 74	+1·9	+1·5	−1·5	−4	0
Vindhya Pradesh	1·56	6·03	−4·47	− 74	+2·3	+1·2	+0·4	−1	+0·2

		Rainfall				Departure from normal of				
								0830 hrs. I.S.T.		
		Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1		2	3	4	5	6	7	8	9	10
Division—Contd.		"	"	"		°	°	mb.	%	
8	Madhya Bharat and Vindhya Pradesh	1·53	5·85	−4·32	− 74	+2·1	+1·4	−0·7	−3	+0·1
9	Madhya Pradesh	4·50	7·64	−3·14	− 41	+1·6	+1·0	+0·6	+2	+0·7
10	Bombay (including Saurashtra & Kutch)	4·89	9·26	−4·87	− 53	+0·7	+1·2	−0·1	−1	−0·4
11	Hyderabad ...	3·18	4·98	−1·80	− 36	+0·2	+0·7	+0·4	+3	+0·8
12	Madras (including Travancore-Cochin)	5·87	6·66	−0·79	− 12	−0·4	+0·8	−0·2	+1	+0·8
13	Mysore ...	3·40	5·71	−2·31	− 40	−1·3	+0·2	+0·1	+3	+0·5
	Mean of India ...	5·31	6·72	−1·41	− 21	+0·4	+0·7	0	+1	+0·3
Sub-Division—Contd.										
15	Madhya Pradesh, East	6·53	9·02	−2·49	− 28	+0·6	+0·4	+1·2	+5	+1·1
16	Madhya Pradesh, West	3·23	6·77	−3·54	− 52	+2·2	+1·4	+0·3	0	+0·5
17	Gujarat ...	0·43	4·85	−4·42	− 91	+0·6	+1·9	−0·9	−5	−0·3
18	Saurashtra and Kutch ...	0·06	3·10	−3·04	− 98	+0·4	+1·2	−0·2	+1	−0·1
19	Konkan ...	20·51	28·85	−8·34	− 29	+0·9	+1·6	+1·6	+3	−1·0
20	Deccan (Desh)	2·52	7·33	−4·81	− 66	+1·0	+0·5	0	−1	−0·4
21	Hyderabad, North ...	3·07	5·34	−2·27	− 43	+1·3	+0·9	−0·1	0	+0·3
22	Hyderabad, South ...	3·30	4·62	−1·32	− 29	−0·7	+0·6	+0·7	+5	+1·2
23	Coastal Andhradesa	2·47	3·77	−1·30	− 34	−0·8	+0·5	−0·8	0	+0·6
24	Rayalaseema	2·95	2·43	+0·52	+ 21	−2·6	0	+0·5	+4	+1·2
25	Tamilnad	0·77	1·57	−0·80	− 51	+0·3	+1·4	−0·5	−1	+1·0
26	Malabar and South Kanara	35·96	35·08	+0·88	+ 3	+0·7	+0·4	+0·7	+3	+0·5
27	Mysore ...	3·40	5·71	−2·31	− 40	−1·3	+0·2	+0·1	+3	+0·5
28	Travancore-Cochin	17·30	20·83	−3·53	− 17	−0·3	+0·4	+0·6	+3	+0·4

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relativ humidi %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs, I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Bay Islands																					
Port Blair ...	259	997·6	-1·0	995·5	82·7	-0·6	87	12	76·5	+1 5·	73	3	80·7	80·2	77·1	77·2	30·3	-1·2	30·5	85	+3
Assam																					
Dibrugarh ...	348	990·1	-1·5	987·0	86·7	-0·3	95	30	73·7	-0·4	70	16	78·7	80·6	76·6	77·5	30·5	+0·3	31·0	91	+4
Sibsagar ...	317	991·6	-0·8	987·4	88·5	-0·1	93	3,23,30	76·4	+0·3	73	17	81·0	83·9	77·9	78·8	31·4	-0·1	31·5	87	+2
Tezpur ...	258	993·5	-1·0	989·7	88·0	-0·6	92	22,28,30	76·4	-0·1	73	17	80·1	83·9	77·6	79·0	31·2	+0·2	31·5	89	+5
Gauhati ...	182	995·0	-1·3	991·5	87·2	-1·7	94	2	75·8	-0·7	71	16	79·9	83·2	77·3	78·6	31·0	+0·3	31·5	89	+7
Dhubri ...	115	997·2	-1·1	994·5	84·6	-1·1	92	2	76·4	+0·3	72	13	79·0	82·1	77·5	78·9	31·5	+0·7	32·6	93	+7
Silchar ...	96	998·1	-1·4	995·7	90·5	+1·3	95	5days	77·5	+1·3	73	3,4,5	82·3	83·8	78·4	79·3	31·2	-0·3	32·2	83	-1
Tura ...	1215	960·2	...	957·3	85·6	...	91	9	74·3	...	69	2	78·9	80·9	76·2	77·0	29·7	...	29·9	88	..
West Bengal																					
Dum Dum ...	33	997·2	...	994·5	91·7	...	101	4	79·1	...	75	4 days	85·6	85·1	80·5	80·2	33·4	...	32·8	80	..
Calcutta ...	21	997·6	-2·4	994·7	92·6	+0·2	102	4	80·4	+1·8	75	13	85·8	85·7	81·4	80·7	34·5	+1·5	33·5	82	+3
Saugor Island ...	10	997·8	-2·5	995·4	88·0	-1·6·	91	4,6	81·6	+0·7	75	1	85·2	84·6	81·0	80·8	34·5	+0·2	33·9	83	+
Sandheads ...	32	997·0	-3·0	994·7	...	...	...	...	...	...	...	...	85·0	85·2	81·3	81·6	35·1	+0·3	35·3	85	+
Midnapore ...	149	992·7	-2·7	989·5	94·6	+0·4	109	3,4	78·3	-0·9	68	30	85·2	87·2	78·7	80·5	30·5	-1·5	32·8	75	-
Contai ...	36	996·3	...	993·7	90·1	...	96	8	79·6	...	63	11	85·3	85·1	80·4	81·1	32·3	...	34·4	81	.
Burdwan ...	105	994·2	-2·7	991·1	93·3	-0·2	106	2,3	79·3	+0·5	74	13	84·7	86·6	80·1	79·0	33·2	+0·7	30·6	81	+
Krishnagar ...	48	997·0	-2·4	994·2	93·0	+0·2	105	2	77·9	-0·6	72	11	84·2	84·9	80·6	79·6	34·2	+1·0	31·8	85	+
Asansol ...	414	984·0	-2·1	981·0	93·6	-4·3	110	3	78·5	-0·6	74	1,11	85·5	87·2	79·5	80·0	31·7	+0·3	32·0	77	+
Berhampore ...	62	996·4	-2·3	993·4	92·7	0	107	3	79·0	+0·5	75	19	84·2	84·5	80·3	79·4	33·4	+0·6	32·1	84	+
Malda ...	103	995·5	-2·2	992·4	90·1	-1·4	102	3	78·0	-0·2	74	13	82·7	83·9	79·1	79·4	32·5	-0·1	33·4	85	+
Cooch Behar ...	145	996·0	...	992·5	87·6	...	93	2,7,29	76·3	...	69	13	80·4	84·5	77·3	79·4	30·7	...	32·1	87	.
Jalpaiguri ...	271	991·3	-1·7	988·1	87·2	-1·4	...	...	75·9	+0·2	...	...	79·1	84·1	76·2	78·6	29·4	-1·4	30·9	87	+
Orissa																					
Balasore ...	65	996·0	-2·2	993·6	92·1	-1·1	101	3	79·9	+0·8	76	8,22	85·0	86·5	79·7	81·2	31·9	-0·2	33·6	79	+
Chandbali ...	20	997·8	-2·5	995·3	94·9	+1·0	...	...	79·1	-0·6	...	...	84·4	85·9	79·3	79·8	32·0	-1·4	32·2	79	
Puri ...	20	999·1	-1·4	996·2	88·6	-0·4	94	19,20	79·5	-1·4	74	20,29	84·3	85·4	80·3	81·8	33·5	-0·3	35·6	84	-
Cuttack ...	87	996·3	-1·9	993·2	94·1	-1·4	109	3	78·1	-1·5	74	2,13	83·5	86·7	77·9	78·8	30·2	-1·4	29·9	77	-
Gopalpur ...	56	998·2	-1·1	995·1	88·3	-1·5	95	19	79·5	-0·8	73	28	83·6	84·9	79·6	80·9	32·7	-0·5	34·2	84	-
Angul ...	455	984·1	-1·1	980·8	95·3	-0·6	108	3	79·4	+0·5	74	20	83·7	90·4	76·9	78·5	28·2	-1·4	27·7	74	
Sambalpur ...	486	982·9	-1·4	979·2	96·4	-1·1	110	2	...	...	...	...	84·0	91·7	79·4	81·8	32·4	+4·3	32·4	82	+
Jharsuguda ...	726	974·3	...	970·7	...	...	...	...	...	...	...	...	84·8	88·7	77·8	78·6	29·4	...	28·5	74	
Titilagarh ...	691	976·5	...	972·9	96·4	...	109	2	79·1	...	72	24	84·0	91·1	75·1	76·6	25·6	...	24·7	67	
Chota Nagpur																					
Purulia ...	835	969·6	...	967·2	94·6	...	110	3	78·7	...	70	9	84·7	86·9	78·4	79·7	30·0	...	31·7	76	
Jamshedpur ...	423	983·6	-2·3	980·4	94·8	-2·2	109	3	80·0	0	76	11,12	84·9	88·3	77·7	78·1	29·7	-0·2	28·5	72	
Chaibasa ...	742	973·0	-1·9	969·6	94·6	-2·3	108	3	79·0	-0·2	72	20	83·6	88·3	77·9	79·7	30·4	+1·7	29·3	77	
Ranchi ...	2,150	927·5	-1·2	924·9	91·3	-0·7	104	3	74·9	-0·4	71	16,25	80·6	83·4	73·9	74·6	27·1	+2·2	25·4	72	
Hazaribagh ...	2,006	931·6	-2·1	929·0	90·9	-2·2	105	3	75·4	-0·7	70	12	81·7	81·1	74·3	74·8	25·8	+1·7	26·6	73	
Daltonganj ...	725	973·3	-1·8	969·9	97·1	-3·2	111	2	79·6	-1·3	73	28	87·5	89·3	77·2	77·0	26·9	+0·8	25·8	64	
Dhanbad ...	839	969·8	...	...	94·3	...	110	3	77·7	...	72	11	84·7	...	77·6	...	29·3	...	...	73	
Bihar																					
Purnea ...	124	995·2	-1·7	991·6	90·4	-1·0	115	3	77·9	+0·5	72	13	83·0	86·6	78·9	79·8	32·0	+0·4	31·4	83	
Saharsa * ...	156																				

* Closed from 1-6-50

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from:—																				STATION
I.S.T.	Departure from normal	Mean 1730 hrs, I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	0830 hrs. I.S.T.										1730 hrs. I.S.T.										
											N	NE	E	SE	S	SW	W	NW	Calm		N	NE	E	SE	S	SW	W	NW	Calm	
25		26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43		44	45	46	47	48	49	50	51	52		53
6	+0·9	7·6	14·57	−7·18	2·08	22	22	+0·5	14·1	+0·4	0	0	0	0	0	18	12	0	0		0	0	0	0	0	19	10	1	0	**Bay Islands** Port Blair
7	+1·5	6·7	21·30	+1·63	2·55	6	24	+4·4	1·2	0	12	4	2	0	0	0	0	4	8		3	2	3	0	2	1	1	1	17	**Assam** Dibrugarh
9	+0·9	6·7	19·74	+4·61	3·23	22	22	+4·9	3·9	+1·7	7	14	1	2	0	1	1	3	1		4	12	1	3	4	0	0	3	3	Sibsagar
0	+0·8	5·2	12·49	+0·35	2·66	18	19	+3·0	2·0	+0·1	2	3	16	5	0	0	0	0	4		1	2	11	4	0	2	0	0	10	Tezpur
1	+0·9	6·3	14·29	+1·99	2·15	18	21	+6·3	2·8	+1·4	2	12	3	3	1	3	2	2	2		2	10	3	1	1	2	2	0	9	Gauhati
5	+0·4	5·6	22·24	−1·87	4·40	13	16	−2·1	5·6	+1·3	2	12	10	2	2	0	0	0	2		0	8	9	1	1	6	0	0	5	Dhubri
3	+1·2	5·6	16·44	−6·73	3·20	14	15	−6·3	1·0	−0·7	1	1	7	0	0	0	1	0	20		1	0	4	0	0	0	1	0	24	Silchar
1	...	5·7	30·00	...	4·00	12	23	...	4·9	...	1	1	2	5	7	9	0	0	5		0	1	2	3	4	11	1	2	6	Tura
4	...	7·2	14·66	...	2·40	25	15	...	9·4	...	0	3	4	3	11	9	0	0	0		0	0	2	8	13	4	1	0	2	**West Bengal** Dum Dum
4	+0·3	7·1	15·14	+3·45	5·50	25	13	−0·2	4·9	+0·6	1	3	3	2	14	6	1	0	0		0	2	2	7	10	4	2	0	3	Calcutta
0	−0·5	6·0	17·92	+6·29	7·48	11	13	+0·9	18·1	+4·9	2	2	1	1	10	13	1	0	0		0	1	1	3	12	12	0	1	0	Saugor Island
4	+1·7	7·1	7·40	−0·47	3·13	10	5	−4·4	...	...	1	1	0	0	2	23	1	2	0		0	1	1	0	6	22	0	0	0	Sandheads
1	+0·1	7·0	20·02	+9·81	10·90	11	11	−1·4	5·0	+1·6	0	6	1	0	8	7	4	1	3		1	1	2	1	13	2	0	0	10	Midnapore
7	...	6·4	20·54	...	6·10	11	11	...	8·8	...	1	1	1	2	4	17	1	2	1		0	1	0	7	8	9	1	3	1	Contai
3	−0·6	6·6	13·07	+2·55	3·23	11	16	+3·6	7·3	+4·2	0	3	6	3	5	12	1	0	0		0	2	7	7	6	6	0	0	2	Burdwan
1	+0·4	6·8	13·73	+3·40	4·92	12	16	+3·3	5·8	+0·8	0	2	5	4	17	1	0	0	1		1	1	2	10	10	2	0	0	4	Krishnagar
9	+0·6	7·2	16·26	+6·75	3·39	12	16	+4·3	5·6	+0·3	1	2	7	4	3	3	4	2	4		1	3	9	7	2	2	0	2	4	Asansol
9	+0·6	7·5	14·38	+4·71	2·68	18	78	+5·7	3·9	+0·2	0	0	11	2	14	2	0	0	3		0	3	8	6	6	2	1	0	4	Berhampore
5	+1·5	7·0	17·92	+8·10	3·20	19	17	+5·5	5·0	−0·4	0	4	11	6	4	1	1	0	3		0	5	8	3	5	1	0	1	7	Malda
6	...	6·0	35·56	+1·77	10·36	12	20	−0·6	4·4	...	0	7	16	2	2	1	0	0	2		1	5	12	2	3	0	0	0	7	Cooch Behar
2	+0·4	(h) 6·0	(h) 24·46	...	...	...	...	...	(h) 5·1	+3·0	0	9	11	0	0	0	0	0	4		1	3	11	2	2	2	0	0	2	Jalpaiguri
0	+1·6	7·2	13·82	+4·65	2·31	11	11	−0·1	(i) 6·7	+1·9	1	3	1	1	3	17	0	1	3		1	1	1	7	6	12	0	0	2	**Orissa** Balasore
5	...	(i) 0·6	(i) 6·17	...	...	...	...	...	(i) 7·1	...	1	0	0	2	5	10	3	1	0		1	0	0	8	7	2	3	1	0	Chandbali
7	+1·4	7·1	12·01	+4·55	3·14	23	12	+3·9	13·7	+1·6	0	0	0	1	1	18	6	3	1		0	0	0	1	1	27	1	0	0	Puri
1	+0·4	7·3	8·50	−1·45	1·58	13	16	+4·6	4·9	+1·9	1	0	0	0	1	7	7	4	10		0	0	0	2	5	4	6	0	13	Cuttack
3	+2·8	7·0	9·73	+4·27	1·81	28	14	+6·4	9·3	−1·3	1	2	0	0	4	8	2	1	12		1	0	0	1	14	10	1	0	3	Gopalpur
3	+0·5	6·5	4·19	−4·35	1·10	20	8	−3·6	6·6	+1·4	1	1	0	1	5	4	6	9	3		1	1	1	1	3	5	12	6	0	Angul
5	−0·7	4·0	12·24	+2·15	4·17	23	14	+3·3	5·7	+1·7	1	1	0	2	6	17	3	0	0		0	3	2	1	8	8	4	2	2	Sambalpur
8	...	7·1	10·64	...	1·58	25	17	...	...	...	1	0	2	0	6	10	3	0	8		0	2	1	0	6	6	5	2	8	Jharsuguda
8	...	6·3	11·55	...	2·51	29	12	...	4·1	...	1	2	0	0	7	13	6	0	1		4	2	0	2	7	8	4	3	0	Titilagarh
5	...	7·3	13·77	...	3·41	11	16	...	3·2	...	3	1	3	4	3	2	5	6	3		9	4	0	2	3	3	3	3	3	**Chota Nagpur** Purulia
5	+1·1	7·4	14·51	+7·00	5·43	11	11	+0·3	5·7	+1·1	0	1	3	0	1	5	11	4	5		2	2	2	3	0	3	9	3	6	Jamshedpur
4	+2·3	7·6	11·68	+3·89	3·00	11	12	+1·3	3·0	+0·3	1	0	0	0	0	10	3	2	14		2	1	0	2	1	6	3	1	14	Chaibasa
3	+1·3	(b) 6·7	17·06	+8·47	3·35	27	14	+2·6	4·2	−1·3	1	0	1	0	4	6	5	1	12		2	3	1	0	1	14	0	3	5	Ranchi
5	+0·8	7·2	8·53	+0·20	1·96	11	11	+0·3	5·8	−1·0	3	2	0	2	3	7	2	6	5		6	4	3	0	3	2	3	7	2	Hazaribagh
0	+1·5	6·6	6·41	+0·39	0·89	14	13	+4·8	4·0	−0·6	3	3	1	1	2	2	12	1	5		1	1	2	9	2	0	2	10	3	Daltonganj
	...	...	19·68	...	3·94	15	13	...	5·4	...	0	1	8	0	0	7	3	2	9		...	...	...	...	...	...	...	...	...	Dhanbad
8	+0·4	6·2	25·00	+14·77	10·26	12	15	+3·2	5·0	+2·0	0	8	16	4	1	1	0	0	0		0	1	12	3	0	0	1	0	13	**Bihar** Purnea
																														Saharsa *

(a) Mean of 24 days (b) Mean of 23 days (i) Mean of 28 days (h) Mean of 29 days

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			R hu
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Bihar (*Contd.*)																				
Darbhanga ...	161	993·2	−1·9	990·3	92·4	−0·5	105	8	77·8	−0·7	73	12,18	83·7	88·6	79·5	81·3	32·8	+1·6	32·8	83
Motihari ...	218	991·6	−1·8	988·2	91·6	−1·6	101	4,9	76·1	−1·7	69	1	82·9	86·3	79·4	81·1	32·7	+1·6	34·3	85
Patna ...	173	992·3	−1·8	989·1	94·4	−1·8	109	3,4,8	79·8	−0·1	76	4 days	84·6	88·6	79·2	78·8	31·5	+0·4	28·9	79
Dehri ...	352	985·4	...	982·6	98·9	...	112	3,8	82·2	...	76	12,26,27	86·5	91·1	77·8	78·7	28·8	...	27·7	69
Gaya ...	365	985·0	−2·1	981·5	96·7	−2·8	112	3	81·0	−0·3	74	12,16	87·0	91·7	78·6	78·9	29·4	+3·0	28·7	70
Dumka ...	489	981·5	−2·3	978·6	92·3	−1·8	109	3	78·6	+0·1	76	4 days	83·5	85·3	79·3	80·0	32·3	+1·7	32·6	82
Sabour ...	122	994·1	−2·4	990·9	92·2	−2·3	105	3,4	78·9	−0·3	69	12	83·9	87·0	79·8	80·4	34·2	+2·3	32·6	84
U. P., East																				
Gonda ...	360	986·6	...	982·4	97·0	−0·8	111	8	80·4	+0·4	75	13,17,23	85·0	93·8	78·1	78·9	29·6	+0·3	27·0	74
Gorakhpur ...	254	990·1	−1·5	986·1	94·8	−2·1	109	8	80·6	+1·4	75	17	84·8	90·9	78·4	78·7	30·1	−0·4	28·1	75
Azamgarh ...	255	989·1	...	985·7	96·4	...	112	4,8	81·4	...	74	15	85·9	92·7	79·6	80·2	31·5	...	29·5	76
Banaras ...	250	988·9	−2·0	985·6	98·9	−2·0	111	8	81·6	−0·4	76	10,28	88·1	94·2	79·1	80·1	29·8	+1·8	28·6	68
Allahabad (Bamrauli) ...	322	986·5	−1·8	983·5	102·1	−0·6	111	8	83·5	+0·6	75	21	91·0	97·7	77·2	78·0	25·7	−2·3	23·7	55
Fatehpur ...	375	985·5	...	981·7	103·1	+0·1	110	2	83·7	+0·8	75	12,26	89·8	100·9	77·3	79·7	26·5	−1·4	25·2	58
Banda ..	398	983·9	...	980·0	105·2	...	111	1	84·4	...	72	13	91·9	102·0	76·0	78·7	23·4	...	21·5	46
Kanpur ...	414	983·6	−1·5	979·8	102·2	−0·5	110	1,7	82·9	−0·1	71	12	88·8	99·8	77·5	78·2	27·3	+1·0	23·2	59
Lucknow ...	371	985·9	−0·9	982·2	100·8	+0·6	111	7	81·0	−0·7	75	10,14,23	87·5	95·9	77·8	79·3	28·1	+0·6	26·0	67
Bahraich ...	407	985·4	−0·3	981·8	97·6	−1·1	111	8	79·3	−0·7	73	23,24	85·4	92·5	78·1	79·9	29·7	+0·7	29·3	74
U. P., West																				
Jhansi ...	823	970·8	−1·3	966·4	103·6	−0·4	112	1	85·8	+1·3	74	13	92·1	102·4	74·7	75·6	21·2	−3·2	17·7	43
Agra ...	553	979·0	−1·4	975·8	106·5	+2·5	110	23	86·0	+2·5	79	4	92·2	104·2	75·7	76·5	22·7	0	18·3	45
Mainpuri ...	516	980·4	−1·1	975·9	105·3	+0·6	111	7	83·0	+0·2	74	12	90·4	101·4	77·6	79·7	26·2	+0·3	25·0	56
Aligarh ...	615	976·8	..	973·0	105·7	+3·5	110	13	83·5	+0·9	75	23	90·5	102·8	76·4	77·7	24·8	+0·5	21·3	52
Bareilly ...	568	978·6	−1·7	974·6	100·8	+0·6	110	7	80·4	0	72	23	87·2	97·9	75·7	77·3	24·9	−3·0	22·9	59
Meerut ...	728	972·8	...	...	103·8	...	107	4days	82·1	...	75	4	87·7	...	75·8	...	24·9	...	...	57
Roorkee ...	899	967·4	−1·9	963·3	100·2	0	107	9,10	78·5	−0·3	67	12	87·7	96·1	75·2	77·0	24·3	+0·6	23·0	59
Dehra Dun ...	2239	924·3	−1·7	921·2	93·5	−0·2	100	10	74·3	+0·2	69	3	81·8	90·3	72·5	75·0	23·7	+2·0	23·5	65
Punjab (I)																				
New Delhi ...	710	973·4	−1·8	969·2	104·7	+2·3	109	13	84·7	+2·2	76	20	90·9	102·4	74·9	75·6	22·4	−1·7	18·0	47
Hissar ...	725	971·2	−2·8	969·3	108·6	+3·0	114	12	84·8	+2·6	77	5,6	90·9	105·5	76·0	78·2	23·8	−0·1	20·3	49
Karnal ...	818	969·7	...	965·2	104·6	...	109	11	81·4	...	76	5,23	87·1	101·9	75·0	75·1	24·2	...	17·7	55
Ambala ...	892	966·6	−2·3	963·3	105·8	+2·2	110	10,20	81·8	+1·1	76	3,23	85·9	103·3	74·9	78·7	24·7	+1·7	22·4	50
Patiala ...	822	969·1	...	964·9	104·4	...	109	11	81·2	...	73	3	88·6	101·8	78·3	81·2	28·2	...	27·0	62
Ludhiana ...	811	969·5	−1·9	965·7	107·9	+3·2	114	11	83·2	+2·3	74	1	91·7	106·4	75·1	77·2	22·2	+0·1	18·9	43
Ferozepore ...	657	974·3	...	971·1	106·9	...	114	11	81·5	...	71	2,3	91·2	104·3	74·6	76·9	22·4	...	19·0	41
Amritsar ...	756	970·9	...	967·4	106·7	...	114	11	80·4	...	69	1	91·3	105·2	77·5	80·8	25·3	...	24·4	52
Jammu & Kashmir																				
Srinagar ...	5,205	835·5	−1·0	832·4	83·5	−1·9	93	21	59·7	+2·4	52	5	69·1	80·4	62·2	65·5	16·5	−0·5	16·0	69
Gulmarg ...	8,709	735·7	−1·8	...	72·5	+4·7	...	...	46·4	+1·2	...	...	64·3	...	58·8	...	15·0	+3·5	...	73
Dras (R) ...	10,059																			
Leh ...	11,529	664·9	−0·9	662·0	69·6	−1·7	80	21	45·8	+1·5	37	1,2	55·2	65·8	43·7	47·3	6·1	−0·1	5·3	35
Skardu (R) ...	7,505																			
Gilgit (R) ...	4,890																			
Misgar (R) ...	10,190																			

(R) Register not received.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from:—																	STATION
											0830 hrs. I. S. T.									1730 hrs. I. S. T.								
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bihar *(Contd.)*
6·4	+1·6	4·7	10·24	+2·66	2·09	12	17	+8·2	4·6	+0·3	1	18	6	3	0	0	1	1	0	0	5	12	2	0	1	0	0	10	Darbhanga
5·7	+1·6	5·1	16·16	+7·45	2·90	13	16	+6·6	3·8	−1·0	0	0	25	0	0	0	1	0	4	0	0	14	0	0	0	0	0	16	Motihari
6·2	+1·7	5·6	11·96	+4·82	3·21	26	13	+4·0	6·2	+1·2	2	20	4	2	1	0	1	0	0	4	16	5	1	0	0	1	0	3	Patna
5·7	...	6·7	15·62	+10·25	4·91	27	10	+3·1	4·0	...	2	4	4	4	1	7	0	5	3	4	9	1	2	1	1	0	8	4	Dehri
6·5	+2·8	6·8	6·18	−0·27	1·26	26	15	+7·5	6·9	+0·8	2	5	7	3	3	3	2	2	3	6	8	3	1	3	1	1	5	2	Gaya
3·1	−1·6	4·6	17·11	+7·11	6·23	12	17	+5·1	5·2	+2·4	2	4	11	9	0	1	3	0	0	1	11	9	4	0	2	3	0	0	Dumka
6·4	+0·6	6·7	18·02	+11·84	6·70	12	14	+6·2	6·8	+1·1	0	3	19	6	0	2	0	0	0	0	3	14	5	3	0	1	2	2	Sabour
																													U. P., East
4·8	+0·4	3·7	7·62	+0·31	2·80	24	7	−1·3	4·3	−0·7	1	2	22	0	0	0	1	0	4	2	0	8	0	0	0	5	1	13	Gonda
5·0	+1·6	4·8	11·69	+4·14	2·90	13	10	+1·7	3·5	+0·7	1	4	18	2	0	0	1	0	4	4	1	7	1	1	0	5	4	7	Gorakhpur
4·4	...	5·6	12·54	...	3·21	15	11	...	...	...	0	0	18	1	0	0	2	0	9	0	0	6	2	0	0	3	0	19	Azamgarh
5·2	+1·2	6·1	8·49	+3·93	2·46	28	11	+5·0	6·0 (c)	+2·0	6	2	8	0	4	4	4	1	1	10	6	2	0	1	1	4	6	0	Banaras
4·3	+0·5	5·0	3·64	−1·40	2·09	27	5	+0·7	5·1	−0·2	2	5	6	2	1	3	4	6	1	3	8	5	1	0	1	5	5	2	Allahabad (Bamrauli)
4·0	+0·4	3·7	1·30	−2·14	0·30	30	7	−0·8	4·4	−0·1	0	3	7	2	3	2	5	2	6	0	2	4	0	1	2	3	5	13	Fatehpur
2·9	...	4·7	0·87	...	0·44	12	2	...	4·4	...	1	2	4	0	0	0	19	4	0	1	6	4	0	0	1	15	3	0	Banda
3·4	+1·2	0·6	2·22	−0·97	1·72	12	2	−2·5	7·9	−0·3	3	4	4	2	1	6	3	2	5	3	7	4	1	0	3	6	5	1	Kanpur
4·7	+0·4	3·9	1·04	−3·42	0·32	30	4	−1·5	3·1	+0·5	2	2	16	1	2	1	2	1	3	3	4	10	0	2	2	5	1	3	Lucknow
4·5	+1·6	3·0	7·44	+1·24	2·11	23	8	+1·9	5·0	+1·6	1	3	11	7	0	0	2	1	5	0	1	7	3	0	0	5	4	10	Bahraich
																													U. P., West
3·6	−0·1	4·5	2·79	−1·38	1·27	13	6	+0·5	4·5	−0·5	1	2	0	0	0	5	16	2	4	2	1	0	0	0	9	13	2	3	Jhansi
1·6	0	2·2	0·20	−2·24	0·20	1	1	−2·8	3·4	−1·6	0	0	1	0	0	0	4	1	24	1	1	0	1	2	5	3	8	9	Agra
1·7	+1·7	4·0	1·39	−1·25	0·88	13	3	−0·8	3·1	+0·3	0	2	7	6	2	0	4	4	5	0	0	4	4	0	1	9	2	10	Mainpuri
2·3	−1·0	2·5	1·22	−4·17	1·07	23	2	−2·6	5·2	−0·4	1	0	7	2	3	0	3	5	9	0	2	3	1	0	0	5	8	11	Aligarh
2·4	+0·1	2·8	2·79	−2·44	1·05	26	5	−0·4	4·2	+1·3	1	0	10	11	1	3	2	1	1	1	1	9	4	0	4	6	3	2	Bareilly
1·9	...	...	0·18	−3·22	0·18	23	1	−3·1	5·8	...	0	1	7	10	2	0	2	5	3	...	...	...	...	...	...	...	...	...	Meerut
1·7	−0·2	2·5	3·29	−1·21	1·68	21	6	+0·6	4·7	+1·5	0	1	0	24	0	0	0	1	4	0	1	0	7	0	1	0	6	15	Roorkee
1·7	+0·3	3·8	7·08	−1·47	1·91	10	10	+0·6	2·1	+0·2	2	1	0	3	2	3	2	0	17	2	7	0	2	2	4	5	3	5	Dehra Dun
																													Punjab (I)
2·1	−0·7	3·0	0·74	−2·29	0·68	20	1	−3·2	10·0	...	1	2	5	6	1	0	8	7	0	5	4	2	2	1	2	7	6	1	New Delhi
	−1·5	0·7	0·13	−1·13	0·10	6	1	−1·9	7·6	+1·7	2	1	1	1	3	10	8	3	1	4	1	0	3	1	6	8	5	2	Hissar
1·9	...	1·0	0·50	...	0·32	23	2	...	3·9	...	3	4	6	6	1	3	1	4	2	0	3	3	2	2	3	9	7	1	Karnal
1·6	−1·2	0·4	0·67	−2·37	0·47	23	2	−2·4	6·3	+2·4	1	2	11	2	0	0	0	1	13	1	0	1	1	0	0	2	3	22	Ambala
2	...	1·5	0·25	...	0·13	23	1	...	5·3	...	3	0	6	13	0	0	2	2	4	2	0	2	3	1	2	6	9	5	Patiala
1·8	−1·1	1·2	0	−2·28	0	...	0	−3·5	3·3	+0·9	0	5	4	12	1	1	1	2	4	0	0	0	2	0	5	4	10	9	Ludhiana
1	...	1·1	0·11	...	0·11	7	1	...	2·1	...	2	1	2	4	6	9	3	0	3	6	3	0	0	2	6	6	4	3	Ferozepore
2	...	0·8	0	...	0	...	0	...	4·9	...	5	1	4	9	3	0	3	3	2	3	1	2	1	0	4	8	10	1	Amritsar
																													Jammu & Kashmir
5	−0·4	8·8	0·46 (m)	−0·94	0·12	1	3	−0·4	2·0 (m)	−0·6	0	1	4	9	2	0	2	0	12	1	0	2	1	1	5	0	4	16	Srinagar
4	−1·3	...	1·51	...	...	...	...	...	5·3	...	2	8	3	3	0	0	1	1	0	...	...	..	...	...	...	...	...	...	Gulmarg
																													Dras (R)
8	−0·3	2·8	0·17	−0·01	0·11	4	1	+0·3	5·0	+2·5	1	0	0	2	2	7	1	0	17	1	4	0	0	0	9	8	3	3	Leh
																													Skardu (R)
																													Gilgit (R)
																													Misgar (R)

(c) Mean of 29 days

STATION	Height of bar cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Re hu
		Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Rajasthan, West																				
Sri Ganganagar ...	580	976·6	...	973·1	106·5	−0·4	112	13	82·1	+0·8	73	1,5	91·1	103·6	74·4	75·7	21·4	0	17·4	43
Bikaner ...	734	972·9	−1·2	969·0	107·6	+1·3	113	11,12,25	83·5	−1·2	78	5,9	88·6	105·1	75·0	75·4	24·0	+0·5	16·0	51
Jaisalmer ...	793	970·7	...	967·2	105·4	...	110	11,23	80·0	...	76	25	83·5	103·6	79·2	85·0	32·2	...	32·2	80
Jodhpur ...	736	974·9	+0·7	970·6	104·1	+0·5	109	7	81·9	−0·4	75	3,10	85·6	100·9	76·0	77·4	26·3	+1·5	21·5	63
Phalodi ...	783	972·5	...	970·0	105·3	...	109	12	80·5	...	72	3	85·2	102·9	76·0	78·6	26·6	...	22·7	63
Barmer ...	638	977·8	−0·8	973·6	104·7	+1·3	110	6	80·5	+0·2	78	28	84·9	103·4	78·0	81·2	29·6	+0·6	26·1	73
Rajasthan, East																				
Sikar ...	1419	951·8	...	947·7	104·2	...	109	11,12	82·7	...	70	8	87·4	100·9	74·4	76·8	23·2	...	20·8	52
Jaipur ...	1431	951·2	−1·4	947·2	104·4	+1·3	110	12	83·1	+2·7	77	12	89·0	101·8	72·3	72·6	19·5	−2·8	14·2	43
Ajmer ...	1593	946·5	−1·2	942·5	101·7	+1·3	106	2,24	81·5	−0·4	70	8	84·7	99·9	71·7	72·3	21·3	−3·0	16·1	53
Kotah ...	843	970·8	−1·1	966·5	104·7	−0·1	110	1,6	85·6	+0·5	75	11	89·7	101·9	74·7	74·8	22·8	−0·5	17·4	48
Jhalawar ...	1053	964·9	−0·4	959·9	103·4	+1·8	109	1	82·1	+0·9	70	8	86·2	99·7	75·0	75·2	24·7	−3·1	18·7	58
Udaipur ...	1910	937·2	...	933·9	97·1	...	104	1	78·5	...	74	3	82·5	94·0	71·7	72·4	21·9	...	17·5	59
Madhya Bharat																				
Gwalior ...	681	974·3	...	970·2	107·6	...	111	1	88·0	...	76	13	95·0	103·2	73·9	75·0	19·0	...	16·8	35
Guna ...	1571	946·9	−1·5	940·0	103·3	+3·0	109	1	81·1	+1·9	74	4	87·5	98·5	73·4	73·5	22·4	−0·6	18·0	51
Neemuch ...	1626	946·7	−0·7	943·2	99·3	+0·9	104	5 days	78·6	+0·8	74	10	82·7	95·2	74·0	74·2	25·1	−1·1	20·3	66
Ratlam ...	1596	948·7	...	944·6	97·1	...	105	6	77·7	...	73	5	79·6	93·4	75·5	81·1	28·0	...	26·1	82
Indore ...	1839	940·2	−0·9	936·4	97·6	+1·2	105	6	76·4	+1·1	73	7,10,11	81·0	94·5	73·3	73·6	24·9	−3·9	19·7	69
Bhopal ...	1643	945·7	−1·1	941·7	99·9	+2·6	106	2	79·7	+2·2	73	12	84·0	96·5	73·2	73·5	23·3	−0·5	18·8	59
Bairagarh ...	1714	943·6	−0·8	939·3	100·8	+3·1	107	2	79·1	+2·1	72	12	84·1	96·7	73·1	73·4	23·6	−1·3	18·7	60
Madhosagar ...	757	972·0	...	968·2	107·0	...	110	1,2	87·6	...	77	13	94·3	103·1	74·2	74·3	19·8	...	15·9	36
Vindhya Pradesh																				
Nowgong ...	750	973·1	−1·4	968·7	104·1	+1·3	112	1	83·1	+0·9	73	13	91·6	101·3	76·2	78·4	23·9	−1·4	22·8	49
Sutna ...	1041	963·1	−1·5	959·3	103·3	+2·8	112	1	83·0	+1·2	75	12	90·2	96·4	78·1	80·6	27·1	+3·4	28·6	58
Umaria ...	1506	948·2	...	945·5	100·7	+2·8	110	1	81·1	+1·5	73	26	86·9	93·8	73·7	75·5	23·0	−0·8	22·7	54
Madhya Pradesh East																				
Gondia ...	1026	965·7	...	962·3	98·8	...	109	1	80·1	...	72	25	85·0	92·6	75·9	76·1	26·4	...	23·3	66
Pendra ...	2040	931·2	−1·5	928·2	95·6	+2·5	108	1	76·6	+0·9	71	16,26	82·6	86·1	72·9	73·8	23·7	+0·2	23·5	64
Champa ...	805	972·2	...	968·1	100·5	...	111	1	80·3	...	73	24	84·6	94·7	76·5	78·5	27·5	...	25·9	70
Raipur ...	979	966·9	−1·1	962·9	98·6	+0·7	107	1	79·3	+0·2	72	25,26	84·6	92·5	76·0	77·2	26·7	+1·8	25·7	68
Kanker ...	1318	956·3	−1·2	952·8	94·8	0	106	11	78·6	+0·7	71	8,24	84·1	90·1	76·7	79·4	28·0	+3·1	29·4	71
Chanda ...	634	980·0	−1·0	975·7	100·0	+0·3	112	1	80·0	+0·1	74	16,17	85·0	93·8	75·2	77·0	25·5	+0·4	24·1	62
Jagdalpur ...	1815	940·0	−1·9	936·9	91·3	−0·4	103	2,3	74·4	0	70	6,7,24	79·7	83·1	74·3	75·4	26·7	+0·7	25·5	78
Madhya Pradesh West																				
Buldhana ...	2133	931·0	...	927·3	96·0	...	100	1	75·3	...	71	2	77·7	93·7	70·9	72·3	22·5	...	18·3	71
Akola ...	925	970·7	−1·0	965·7	101·7	+2·7	107	1,2	80·4	+2·1	73	3,13	84·7	97·8	73·9	74·7	23·7	−1·3	18·9	58
Amravati ...	1313	960·7	−1·0	956·4	100·0	+1·8	108	1	79·5	+1·8	73	24	83·1	92·7	73·9	74·6	24·4	−0·6	21·1	64
Yeotmal ...	1481	958·0	...	948·2	100·1	...	110	1	78·3 (b)	...	70	17,19	83·4	92·2	74·7	75·1	25·4	...	22·0	66
Khandwa ...	1044	966·4	−0·9	961·6	101·6	+2·8	107	2,5,6	80·5	+1·7	75	3	84·9	98·0	74·3	74·3	24·2	−1·1	18·2	59
Hoshangabad ...	992	967·3	−1·2	962·4	102·5	+3·8	109	1	81·0	+1·3	11	25	86·3	99·6	74·9	76·3	24·4	−0·7	20·4	57
Sagar ...	1808	939·0	−1·3	935·5	100·9	+2·5	108	1	80·0	+1·9	73	24	85·4	92·9	71·9	72·7	21·3	−1·2	19·1	52
Jabalpur ...	1289	956·3	−1·1	952·5	100·0	+1·9	111	1,2	79·9	+1·3	71	27	86·7	91·9	74·5	75·4	23·6	+0·5	22·6	57
Seoni ...	2027	932·6	−1·3	929·9	95·3	+1·3	106	1	75·9	+0·6	69	19	82·5	87·3	73·9	74·2	24·7	+1·9	23·1	68

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																					STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.										
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52				53
																																Rajasthan, West
0	-0·7	0·4	0·14	-2·85	0·10	9	1	-1·7	6·6	-1·9	0	0	2	3	1	18	4	0	2	1	1	0	0	1	16	4	3	4				Sri Ganganagar
0·6	-0·7	0·8	0·29	-0·92	0·22	9	1	-1·2	9·8	+2·3	0	1	0	1	1	22	1	1	3	0	0	0	0	0	21	3	5	1				Bikaner
0·8	...	1·0	0·02	...	0·02	2	0	...	22·3	...	0	1	0	3	0	26	0	0	0	0	1	0	0	0	28	1	0	0				Jaisalmer
2·1	-0·7	1·3	0·49	-0·93	0·28	3	2	-0·1	9·9	-2·7	0	0	0	1	0	25	4	0	0	0	2	0	0	0	20	5	3	0				Jodhpur
0·4	...	0·7	0·90	-0·02	0·65	2	2	+0·4	17·1	...	0	0	1	2	1	23	3	0	0	2	0	2	0	2	22	2	0	0				Phalodi
3·1	+0·1	1·5	0	-1·10	0	...	0	-1·5	10·7	+2·5	0	0	0	0	5	24	1	0	0	0	0	0	0	5	25	0	0	0				Barmer
																																Rajasthan East
0·9	...	2·0	0·25	...	0·25	8	1	...	10·2	...	1	1	1	1	4	6	9	5	2	1	1	1	0	0	18	4	4	1				Sikar
1·3	-0·9	2·4	0·31	-1·93	0·26	12	1	-2·9	8·5	+2·6	0	1	0	1	0	1	13	12	2	1	2	2	0	1	2	11	10	1				Jaipur
1·3	-0·9	1·1	1·27	-1·16	0·90	8	3	+0·3	12·2	+4·9	1	2	0	0	0	15	11	0	1	2	1	0	0	0	12	11	3	1				Ajmer
2·3	-0·3	1·9	1·84	-0·80	1·72	12	2	-2·1	8·3	+3·3	0	0	0	0	0	7	20	2	1	0	0	0	0	3	7	11	6	3				Kotah
1·5	-1·6	2·6	1·24	-3·20	1·15	8	1	-6·1	9·6	+3·3	1	0	1	0	0	5	20	3	0	2	2	0	1	0	6	16	3	0				Jhalawar
3·0	...	2·6	0·56	-2·48	0·35	7	2	-2·6	7·5	...	1	1	0	1	1	19	5	2	0	1	0	1	1	4	16	4	3	0				Udaipur
																																Madhya Bharat
1·9	...	4·5	1·73	...	1·25	13	3	...	4·8	...	0	0	1	1	1	5	10	11	1	3	3	2	2	2	4	6	8	0				Gwalior
3·1	+0·5	4·7	0·49	-5·54	0·25	11	2	-5·2	9·8	+2·6	2	0	0	0	0	7	19	2	0	0	1	1	0	2	6	11	9	0				Guna
4·0	+0·7	3·6	2·44	-1·79	1·14	12	3	-1·8	11·9	+2·5	0	0	0	0	0	12	16	2	0	1	2	0	0	0	12	15	0	0				Neemuch
5·8	...	4·3	1·26	...	0·50	11	3	...	10·3	...	0	0	0	0	0	10	19	1	0	1	0	1	0	0	5	20	3	0				Ratlam
4·0	-0·6	3·9	1·71	-4·09	1·16	10	2	-5·3	14·8	+2·4	0	0	0	0	0	2	25	3	0	2	0	1	0	0	5	20	2	0				Indore
3·5	-0·6	4·9	1·40	-5·43	1·10	12	3	-6·4	8·5	+2·7	0	0	0	0	0	6	16	8	0	1	1	0	0	0	5	15	8	0				Bhopal
3·8	-0·3	5·6	2·27	-4·56	1·88	12	3	-6·4	13·1	+4·3	2	0	0	0	0	0	14	13	1	5	0	0	0	1	1	12	11	0				Bairagarh
2·2	...	3·7	1·45	...	1·24	13	2	...	9·1	...	1	1	1	0	2	4	16	4	1	4	2	1	0	2	3	9	9	0				Madhosagar
(b)																																**Vindhya Pradesh**
3·3	-0·7	4·3	2·69	-2·75	1·30	13	7	+0·9	4·8	+1·2	0	2	0	0	0	12	11	3	2	7	4	0	0	1	5	8	5	0				Nowgong
4·5	+0·5	5·0	0·56	-4·98	0·39	15	2	-4·3	5·6	-0·1	2	1	2	1	5	10	2	2	5	3	3	4	2	2	6	3	4	3				Sutna
5·9	+0·8	6·6	1·42	-5·70	0·59	26	4	-6·0	4·7	+0·3	0	1	0	0	0	2	13	9	5	2	2	0	3	0	3	5	8	7				Umaria
																																Madhya Pradesh East
4·6	...	4·0	4·08	...	1·37	26	8	...	4·2	...	2	2	0	2	1	7	8	7	1	3	0	0	1	0	8	0	7	11				Gondia
4·6	+0·3	6·8	8·16	+0·23	3·51	17	8	-3·7	5·4	+0·5	4	1	1	2	10	2	3	7	0	4	1	3	2	8	3	2	7	0				Pendra
6·1	...	6·2	3·96	...	0·82	30	9	...	6·3	...	1	2	0	1	1	4	16	4	1	3	0	2	0	3	4	8	7	3				Champa
6·7	+1·7	6·5	9·33	+0·27	1·78	14	11	+1·3	7·7	-0·6	0	0	0	0	2	11	12	2	3	3	1	0	1	1	6	12	6	0				Raipur
6·4	+0·4	6·9	5·13	-5·27	1·57	30	7	-3·3	4·8	-0·5	0	0	0	0	0	12	11	1	6	2	0	0	1	1	6	7	0	13				Kanker
6·2	+1·5	6·5	5·31	-2·74	1·89	8	8	-1·8	5·5	+0·2	0	0	0	4	0	11	0	14	1	0	0	2	7	0	5	0	11	5				Chanda
6·7	+1·7	7·4	4·71	-4·96	1·10	3	12	+0·7	5·3	+1·4	0	0	0	9	2	15	1	0	3	0	3	0	10	0	12	2	2	1				Jagdalpur
																																Madhya Pradesh West
4·3	...	4·7	0·68	...	0·38	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...				Buldhana
4·8	+0·1	4·6	1·54	-3·99	0·75	2	4	-4·1	10·9	+3·2	0	0	0	0	0	0	13	17	0	2	2	0	0	0	0	8	18	0				Akola
5·2	+0·6	6·2	6·16	-0·39	1·07	24	8	-0·7	9·8	+2·4	0	11	0	0	0	5	0	14	0	0	7	0	3	0	5	0	15	0				Amravati
5·8	...	6·3	2·93	...	0·82	15	6	...	13·2	...	2	0	0	0	1	5	16	6	0	7	1	1	3	0	6	4	8	0				Yeotmal
4·3	+0·1	5·9	1·04	-4·56	0·78	2	2	-5·0	11·8	+3·6	0	0	0	0	0	1	25	4	0	3	0	1	1	1	4	16	4	0				Khandwa
3·5	-0·9	4·5	0·48	-5·39	0·22	12	2	-6·2	4·9	+1·0	1	0	0	0	3	11	9	4	2	0	1	0	0	1	8	11	5	4				Hoshangabad
4·8	+1·0	6·4	1·71	-4·48	0·96	24	3	-5·1	14·5	+2·5	0	0	0	1	0	1	26	2	0	0	1	1	4	0	11	5	8	0				Sagar
5·4	+1·5	6·2	5·70	-1·33	1·61	15	9	+0·2	6·0	+2·4	0	0	0	0	6	11	10	1	2	0	3	1	1	2	11	7	4	1				Jabalpur
4·4	+0·1	5·6	5·06	-3·50	0·76	15	12	+0·9	4·7	+0·3	2	1	0	1	3	10	5	5	3	2	0	2	1	4	6	7	7	1				Seoni

(b) Mean of 29 days.

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M.

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relat humi %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Madhya Pradesh West (Contd.)																					
Chhindwara ...	2,248	926·2	...	923·3	94·2	...	105	1	75·6 (b)	...	69	8	81·0	81·7	72·9	74·2	24·4	...	23·3	68	...
Betul ...	2,144	930·4	...	926·5	95·2	...	105	1	76·4	...	71	17	80·7	91·0	71·4	71·9	22·5	...	19·0	63	...
Nagpur ...	1,010	966·5	-1·3	962·9	100·5	+1·0	110	1	80·1	+0·5	74	14,16	85·4	92·2	77·6	79·3	28·8	+4·6	25·3	71	+15
Gujarat																					
Deesa* ...	466	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Surat ...	39	1002·5	+0·2	999·1	93·0	+0·2	96	4,12	81·8	+1·9	77	19	86·0	89·5	79·9	81·1	32·1	+1·2	32·5	76	+2
Ahmedabad ...	163	996·8	-0·6	991·8	101·9	+0·1	105	6	82·1	+1·1	80	6,28	85·9	99·5	77·9	79·1	29·0	-0·4	24·7	69	-1
Dohad ...	1,093	965·2	...	961·2	97·8	+0·6	103	6	78·3	-0·2	74	11	82·1	96·1	74·7	75·3	26·0	-2·9	20·5	69	-6
Baroda ...	115	998·7	...	994·4	100·6	+2·9	104	5	82·0	+2·2	78	6	85·8	97·5	78·1	79·5	29·4	-0·5	26·2	69	-7
Saurashtra & Kutch																					
Bhuj ...	343	990·1	+0·3	986·8	95·8	-1·5	100	5,23	81·2	+1·5	79	4	84·7	92·5	77·0	77·2	28·2	-1·8	24·9	69	-1
Dwarka ...	37	1000·7	-0·4	998·5	89·0	-0·3	91	2	82·6	+0·2	81	4 days	84·0	86·5	79·9	81·1	33·0	+0·3	33·8	83	+1
Jamnagar ...	60	...	...	...	97·2	+1·3	101	21	80·9	+0·8	78	4	85·9	...	80·7	...	33·5	+2·0	...	78	+4
Rajkot ...	432	987·1	-0·7	983·4	102·0	+2·6	106	5,6	80·4	+2·2	79	6 days	84·2	97·5	77·3	78·8	28·9	-0·4	25·1	72	-2
Veraval ...	26	1002·1	-0·5	1000·1	88·5	...	90	4 days	81·6	...	80	16,27	83·7	86·1	80·0	81·6	33·3	...	34·8	85	+3
Bhavnagar ...	55	1000·9	-0·4	996·5	99·7	-0·1	108	1,24	81·7	+1·5	77	28	85·3	98·8	76·9	83·1	27·8	-1·3	31·5	67	0
Konkan																					
Dahanu ...	15	1003·2	...	1001·2	90·8	...	94	17	81·2	...	76	13,16	85·0	88·9	79·9	81·6	32·5	...	33·5	76	...
Bombay ...	35	1003·5	-0·4	1001·5	90·3	+1·8	95	4	80·4	+1·8	74	18	84·3	87·0	79·1	79·6	31·6	+0·6	31·2	79	0
Alibag ...	23	1004·5	-0·3	...	88·1	+1·0	92	9	80·3	+1·8	75	12,17	83·3	...	80·9	...	35·0	+3·8	....	90	+10
Harnai ...	66	1003·7	...	1001·2	86·2	...	88	4 days	77·5	...	65	16	82·5	84·0	79·3	79·8	32·7	...	32·9	86	...
Devgad ...	117	1001·1	...	999·4	87·7	...	93	1	79·9	...	74	17	81·8	85·6	78·9	80·6	32·5	...	33·4	87	...
Vengurla ...	29	1005·0	...	1003·1	86·8	...	91	1	77·0	...	73	16	81·3	83·9	77·8	79·0	30·9	...	31·7	85	...
Marmagao ...	202	999·2	-0·6	997·4	84·4	-0·2	88	11	77·3	+1·1	71	4	80·8	82·8	77·2	77·9	30·2	+0·5	30·5	84	0
Honavar ...	85	1004·9	...	1003·0	85·2	...	89	4 days	75·5	...	70	5	78·8	81·8	76·3	78·1	29·8	...	31·2	90	..
Deccan (Desh)																					
Jalgaon ...	660	980·2	...	975·8	103·4	...	108	2	80·6	...	79	6 days	85·0	100·1	98·3	82·3	30·0	...	29·5	73	...
Malegaon ...	1,432	955·1	-0·4	950·6	99·8	+3·5	105	1,2	77·2	+2·1	75	3,27	84·3	93·5	73·5	74·0	23·3	-1·7	19·8	57	-11
Deolali ...	1,874	941·2	...	...	90·3	...	96	2,3	73·4	...	71	3,6	78·6	...	72·3	...	24·5	...	...	73	...
Ahmednagar ...	2,154	932·2	-0·6	928·3	94·2	+1·9	101	2	72·5	+0·5	69	16	78·6	89·7	70·9	71·5	22·7	-0·8	18·9	67	-4
Poona ...	1,834	942·8	-0·6	941·2	90·2	+0·8	96	2	74·1	+0·6	71	12	79·6	85·7	71·9	73·0	23·6	-0·4	22·5	68	-5
Sholapur ...	1,570	951·8	-0·4	947·2	95·9	+0·7	105	2	74·0	+0·2	68	4	79·7	91·4	72·2	73·0	23·9	+0·4	20·2	69	+1
Miraj ...	1,817	943·9	-1·2	941·2	89·7	+1·5	99	1	72·0	+0·1	69	4	76·5	84·8	72·8	73·8	26·1	+1·1	24·0	84	+4
Kolhapur ...	1,885	942·2	...	939·9	86·2	...	92	1	72·4	...	69	17	76·2	81·0	71·6	72·5	24·6	...	23·8	80	..
Bijapur ...	1,950	939·2	-0·9	935·6	92·3	+0·2	98	1	72·1	0	69	4,21	76·6	87·7	71·6	72·7	24·4	+0·6	21·3	78	+5
Belgaum ...	2,562	920·9	-0·1	918·9	81·7	+0·1	90	2	68·9	+0·6	67	19,21	72·0	77·4	69·8	71·1	24·0	+0·5	23·4	89	+3
Gadag ...	2,131	934·5	-0·8	931·7	87·4	-0·5	95	1	70·9	-0·3	68	4	75·6	82·7	71·3	71·9	24·4	+0·1	22·3	80	-1
Hyderabad, North																					
Aurangabad ...	1,905	940·2	-0·7	935·7	97·0	+2·8	104	1	74·0	+1·0	72	20,21,27	78·8	94·0	72·8	73·8	25·1	+1·1	20·2	75	+3
Parbhani ...	1,350	956·5	...	951·5	100·2	...	107	1	77·1	...	74	2,24	82·4	95·6	74·0	74·6	24·9	...	19·7	66	..
Ramagundam ...	527	984·0	...	980·6	103·8	..	...	...	82·3	...	...	...	87·5	93·1	76·0	79·5	25·4	...	23·2	60	..
Nizamabad ...	1,250	960·4	-1·4	955·7	98·2	+1·2	108	1	78·3	+0·9	74	16	81·1	94·6	72·9	75·4	23·9	-0·4	21·3	66	0
Bidar ...	2,178	930·7	...	926·9	92·7	-0·2	103	1	73·1	+0·7	71	5 days	76·9	86·9	71·0	71·5	23·5	+0·5	20·0	72	+1

(b) Mean of 29 days

* Data not reliable

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																				STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.										
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Madhya Pradesh West *(Contd.)*
5·3	...	5·2	5·27	...	1·70	17	11	...	5·7	...	1	0	0	0	1	3	15	10	0	2	2	1	2	3	2	9	6	3	Chhindwara
4·9	...	6·4	4·57	...	1·29	16	8	...	6·0	...	0	0	0	0	0	4	14	12	0	1	0	2	1	5	2	10	9	0	Betul
5·3	+1·4	6·8	4·17	−4·65	0·72	13	11	+0·8	6·9	...	1	0	0	2	1	7	9	9	1	2	3	0	3	3	5	8	6	0	Nagpur
																													Gujarat
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Deesa *
5·2	+0·5	3·3	0·61	−8·01	0·27	12	3	−5·0	9·1	+1·7	0	0	0	0	0	28	2	0	0	0	0	0	0	0	29	0	1	0	Surat
3·9	−0·9	2·0	0	−3·66	0	...	0	−4·7	4·8	−0·7	0	0	0	0	3	14	12	0	1	0	0	0	0	5	13	9	3	0	Ahmedabad
5·0	−0·4	2·4	1·44	−2·09	1·11	11	2	−3·0	22·5	+12·4	0	0	0	0	0	16	14	0	0	0	0	0	0	0	21	9	0	0	Dohad
5·1	−1·5	1·3	0·07	−6·31	0·05	11	0	−6·7	7·6	+1·0	0	0	0	0	2	18	8	1	1	0	0	0	0	7	20	2	1	0	Baroda
																													Saurashtra & Kutch
5·2	−0·9	1·4	0	−0·38	0	...	0	−1·9	13·7	+2·0	0	0	0	0	0	22	8	0	0	0	0	0	0	2	19	9	0	0	Bhuj
4·7	−0·6	2·8	0·03	−1·98	0·02	17	0	−2·3	16·3	+3·2	0	0	0	0	0	12	18	0	0	0	0	0	0	0	17	13	0	0	Dwarka
4·8	+2·0	...	0·04	−2·53	0·04	13	0	−3·0	12·4	−2·4	0	0	0	0	0	15	15	0	0	...	...	...	...	...	..	...	...	...	Jamnagar
5·1	+0·1	4·2	0	−4·10	0	...	0	−4·8	18·5	+6·8	0	0	0	0	0	17	12	1	0	0	0	0	0	1	13	12	4	0	Rajkot
5·4	−1·3	3·0	0·18	−4·48	0·06	16	0	−3·9	15·5	...	0	0	0	0	0	11	19	0	0	0	0	0	0	0	10	20	0	0	Veraval
5·7	0	5·2	0·12	−3·78	0·12	28	1	−3·7	10·0	+2·1	0	0	0	0	3	14	12	1	0	0	0	0	0	16	7	6	1	0	Bhavnagar
																													Konkan
5·8	...	5·5	2·31	...	0·45	17	7	...	14·4	...	0	0	3	3	0	10	14	0	0	0	0	0	0	0	14	16	0	0	Dahanu
5·3	−1·5	3·9	11·23	−7·84	2·56	11	9	−5·6	7·4	−2·0	1	0	0	1	2	8	13	4	1	0	0	0	0	1	12	16	1	0	Bombay
5·6	−0·8	...	10·05	−13·54	4·80	12	11	−5·7	12·7	+0·2	0	0	3	4	0	10	7	3	3	...	...	...	...	...	...	...	...	...	Alibag
5·9	..	5·0	14·50	...	2·72	11	16	...	10·0	...	0	0	4	8	0	16	0	2	0	0	1	1	7	1	18	2	0	0	Harnai
5·3	...	5·0	12·90	...	2·73	16	15	...	13·7	...	0	2	0	3	0	3	18	4	0	0	0	1	0	4	19	6	0	0	Devgad
5·2	...	6·0	25·15	...	4·02	4	20	...	...	...	0	0	0	0	0	4	12	1	13	0	0	0	0	0	5	18	0	7	Vengurla
5·4	−0·8	5·8	23·38	−8·71	6·50	4	18	−5·0	11·6	+3·5	0	1	2	1	3	3	14	6	0	0	0	0	0	1	7	20	2	0	Marmagao
5·7	...	6·2	37·37	−3·31	5·02	15	26	+2·1	3·7	...	0	0	8	1	0	2	11	3	5	0	0	1	0	3	1	10	5	10	Honavar
																													Deccan (Desh)
5·7	...	3·2	0·29	−4·81	0·27	6	1	−6·3	13·6	...	0	0	0	0	0	0	19	11	0	0	1	0	0	0	1	8	20	0	Jalgaon
5·7	−2·8	3·3	0	−4·35	0	...	0	−6·7	10·4	+1·0	0	1	0	0	0	1	26	2	0	1	0	0	1	0	2	16	10	0	Malegaon
5·7	...	...	2·06	...	0	...	0	...	11·9	...	0	0	0	0	0	11	19	0	0	...	...	...	...	...	...	...	...	...	Deolali
5·1	−0·4	4·5	2·01	−3·22	1·30	6	4	−3·5	6·9	−1·4	0	0	0	0	0	10	9	10	1	0	0	0	0	0	7	14	8	1	Ahmednagar
5·1	−0·3	4·5	0·95	−3·54	0·48	6	2	−5·3	5·2	−4·6	0	0	0	0	0	0	28	0	2	0	0	0	0	0	1	22	7	0	Poona
5·4	+0·4	6·4	3·57	−0·87	1·05	4	8	+1·5	8·1	−1·6	1	1	0	0	17	9	1	0	1	0	0	0	0	0	19	3	7	1	Sholapur
5·0	−1·3	4·2	2·30	−0·41	1·13	4	6	+0·1	10·9	+1·1	1	0	0	0	1	9	17	2	0	1	0	0	1	1	6	15	6	0	Miraj
5·2	...	5·1	1·08	...	0·27	20	4	...	12·0	...	0	0	0	0	1	2	26	1	0	0	0	0	0	0	3	25	2	0	Kolhapur
5·2	+0·2	6·2	1·78	−1·24	0·64	4	4	−1·4	9·3	+0·7	0	0	0	0	0	6	15	9	0	2	0	0	0	1	5	12	10	0	Bijapur
5·1	−0·3	5·9	3·35	−4·75	1·32	4	8	−4·9	6·3	+0·4	3	0	0	4	6	3	11	3	0	3	0	0	3	8	3	11	2	0	Belgaum
5·7	+1·3	6·0	3·02	+0·35	2·03	4	3	−2·6	12·2	+1·4	0	0	0	0	0	15	15	0	0	0	0	0	0	0	15	15	0	0	Gadag
																													Hyderabad, North
5·4	−0·1	5·7	3·25	−2·19	3·21	2	1	−6·7	14·6	+3·4	0	0	0	0	0	4	20	6	0	1	2	0	0	1	6	14	6	0	Aurangabad
5·3	...	5·8	1·72	−3·79	0·83	4	5	−2·8	...	...	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	29	0	1	Parbhani
(e) 5·7	...	(f) 3·9	...	...	...	...	...	...	(f) 5·7	...	5	0	1	10	6	2	1	1	0	3	1	1	4	12	1	2	0	1	Ramagundam
5·5	−0·1	4·9	2·12	−3·69	0·66	4	6	−2·7	5·5	−0·3	0	0	0	0	0	17	5	3	5	0	1	0	0	0	12	0	4	13	Nizamabad
5·7	+1·1	6·3	5·17	+0·56	1·71	23	9	+1·9	12·9	+0·3	0	0	0	0	0	6	21	3	0	1	2	0	1	2	10	10	4	0	Bidar

(e) Mean of 26 days (f) Mean of 25 days

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Rela hum
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Hyderabad, South																				
Gulbarga ...	1,503	953·6	−0·9	948·9	94·4	−1·4	100	1	74·6	+0·4	72	17	78·3	91·2	72·3	73·2	24·7	+0·7	20·6	78
Raichur ...	1,311	960·6	−0·6	956·1	94·5	−0·8	104	1	75·3	+0·4	71	5	79·3	90·1	74·2	76·4	26·6	+1·8	24·8	78
Hyderabad (Begumpet) ...	1,778	943·8	−0·7	940·1	93·9	−0·7	105	1	75·4	+0·2	73	5 days	79·1	87·8	72·4	74·2	25·4	+0·1	23·3	72
Hanamkonda ...	881	972·2	−1·5	968·6	97·6	+0·3	110	1	81·0	+1·5	76	2,16	84·6	93·5	74·5	76·2	24·6	+0·3	23·0	61
Khammameth ...	387	989·9	...	985·9	98·2	...	105	10	80·9	...	71	1,30	85·6	94·6	77·8	80·7	29·0	...	29·5	69
Coastal Andhradesa																				
Nellore ...	66	1001·2	−1·3	997·3	100·9	−0·5	106	1,2	83·6	+1·3	77	24	89·4	96·5	76·5	78·9	25·3	−0·6	25·7	54
Ongole ...	38	1001·8	...	997·8	98·8	...	106	1	83·8	...	77	4	87·7	95·6	75·8	77·8	25·3	...	24·1	57
Masulipatam ...	10	1002·1	−1·3	998·3	96·9	−1·3	102	11,22	81·2	+0·5	74	19	85·8	92·9	78·5	81·5	30·0	−0·6	31·6	72
Kakinada ...	26	1000·5	−1·7	997·9	96·0	−0·8	104	3	81·4	+0·5	75	7	85·6	93·2	78·2	79·4	29·7	−0·8	28·0	72
Visakhapatnam ...	126	996·3	−1·6	993·5	91·0	−0·6	97	22	81·8	+1·1	76	23	85·4	87·8	78·2	79·5	29·7	−0·6	30·6	71
Calingapatam ...	19	999·8	−1·2	996·8	90·3	−2·6	97	8,22	79·9	−0·5	73	23	83·1	86·7	79·4	81·4	32·6	+0·2	34·2	84
Rentachintala ...	348	991·3	...	987·0	100·5	+0·9	109	1,7,9	82·1	+0·1	74	24	86·2	96·3	75·2	76·8	24·9	−2·3	23·1	58
Rayalaseema																				
Cuddapah ...	428	990·5	−0·8	985·8	98·2	−1·7	102	1,22	81·9	+1·4	78	23,28	86·6	94·9	75·8	76·2	26·1	+0·3	23·2	59
Bellary ...	1,473	955·4	−0·9	951·6	91·8	−2·8	98	1,2	76·1	+0·1	70	25	79·3	88·9	71·8	73·1	23·3	+1·0	20·7	68
Kurnool ...	923	973·7	−0·6	968·8	93·8	−3·3	102	1,2	76·0	−1·5	70	23	80·3	90·8	73·4	74·2	25·0	+0·2	21·4	70
Anantapur ...	1,147	966·4	...	962·1	94·2	...	98	1	76·4	...	71	23,25	80·4	90·5	73·1	73·5	24·6	...	20·5	69
Tamilnad																				
Pamban ...	37	1005·2	−0·8	1002·2	88·9	−1·3	92	3,16	81·0	+0·8	80	4 days	83·8	84·6	76·8	78·1	28·3	−2·7	29·9	71
Mathurai ...	437	991·0	−1·3	987·6	99·0	+1·9	103	27	79·6	+1·6	78	21,22,31	87·1	92·8	75·0	75·9	24·2	+1·0	22·9	55
Nagapattinam ...	31	1004·6	−1·1	1001·1	98·8	+1·1	102	28	81·7	+1·9	80	4 days	86·3	90·2	75·8	78·5	25·7	−1·3	28·0	60
Tiruchi ...	295	995·7	−1·4	992·0	98·0	−0·7	101	29	80·3	+1·4	78	2,5	85·3	94·3	74·4	75·4	24·1	0	21·4	58
Coimbatore ...	1,341	961·5	−0·6	958·8	87·4	−1·4	90	5 days	72·8	+0·9	70	18,19	77·5	81·8	72·0	71·9	24·4	−1·2	22·2	76
Salem ...	913	975·3	−0·9	971·1	96·0	+0·7	99	5 days	76·2	+1·3	70	16	79·6	88·6	76·6	79·6	29·9	+3·5	30·5	87
Kallakurichi ...	416	990·7	...	986·7	100·1	...	103	4 days	79·3	...	75	16	85·3	95·7	73·9	74·6	23·4	...	19·7	56
Cuddalore ...	39	1003·7	−1·2	999·8	99·2	+0·6	103	-12,28	81·0	+0·7	76	16	87·1	89·7	77·6	80·7	28·0	+0·1	31·7	64
Vellore ...	703	981·1	−1·0	977·0	98·5	+1·3	103	14	81·4	+2·7	78	15	85·0	95·3	73·1	74·5	22·4	−2·8	19·7	55
Madras ...	51	1002·4	−1·3	999·1	99·7	+0·1	103	14,22	82·6	+1·5	75	25	87·6	90·0	75·1	78·5	24·1	−0·7	28·1	54
Arogyavaram ...	2,299	938·8	...	925·6	88·8	...	94	1	73·4	...	71	5,16	77·2	85·9	69·6	71·1	21·7	...	20·0	67
Malabar And South Kanara																				
Mangalore ...	72	1005·5	−0·4	1003·7	85·3	+0·7	89	12	75·3	+0·4	72	17,19,23	79·0	81·4	76·5	77·2	30·0	+0·5	30·0	89
Kozhikode ...	27	1007·5	−0·5	1005·4	85·4	+0·7	89	5 days	75·5	+0·4	72	18	78·3	81·6	76·5	78·0	30·3	+0·9	31·1	92
Palghat ...	319	997·4	...	995·0	83·8	...	90	6	73·4	...	70	15,17	76·3	79·0	74·5	75·1	28·4	...	28·0	91
Mysore																				
Chitaldrug ...	2,405	925·5	−0·7	923·1	85·0	−2·1	93	1	70·0	−0·2	68	5days	73·2	81·0	69·1	70·5	22·7	0	21·2	81
Hassan ...	3,149	903·8	...	901·0	79·7	−1·3	85	1	67·0	+0·6	65	2,19,20	69·9	75·0	67·6	69·3	23·1	+0·4	23·2	89
Bangalore ...	3,021	906·6	−0·6	903·8	83·5	−0·9	89	27	67·3	+0·6	65	20,21	71·1	78·9	67·4	68·2	21·5	−0·2	19·2	82
Mysore ...	2,518	923·2	−0·6	921·0	83·5	−1·4	88	1,27	67·9	−0·2	66	20,21	72·7	78·3	68·7	69·8	22·4	+0·2	21·4	81

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
4	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Hyderabad, South
5·8	+1·0	6·1	4·32	−0·12	1·43	15	6	−0·9	12·2	+2·1	0	0	0	0	0	7	19	4	0	0	1	1	0	0	5	16	7	0	Gulbarga
5·8	+1·8	6·9	5·28	+1·66	2·72	5	8	+2·0	12·9	+2·8	1	0	0	0	0	5	16	8	0	1	2	0	1	0	6	11	9	0	Raichur
5·6	+1·2	7·3	1·95	−2·46	0·71	14	5	−1·5	11·9	+2·2	0	0	1	0	0	1	21	7	0	1	0	1	0	0	4	15	8	1	Hyderabad (Begumpet)
5·0	+0·9	5·9	1·66	−4·35	0·49	30	7	−1·2	8·8	+1·7	1	0	0	0	1	1	16	11	0	3	1	0	0	0	2	8	15	1	Hanamkonda
5·4	...	7·0	1·99	...	0·71	16	4	...	6·7	...	1	1	0	1	2	2	22	1	0	4	0	1	1	1	3	17	3	0	Khammamath
																													Coastal Andhradesa
5·8	+0·2	6·3	1·42	+0·15	1·13	16	2	−0·9	6·4	+0·6	0	0	0	0	0	0	17	10	3	0	0	1	1	1	1	14	10	2	Nellore
5·6	...	6·8	0·93	...	0·35	7	3	...	8·8	...	0	0	0	0	0	1	23	4	2	1	0	0	2	0	1	19	6	1	Ongole
5·3	+1·5	6·7	2·33	−1·89	0·78	1	8	+1·8	9·6	+2·1	1	0	0	0	1	6	11	9	2	1	0	0	2	4	4	8	8	3	Masulipatam
4·6	−1·0	4·6	2·53	−2·15	1·35	5	6	−1·1	7·2	+1·1	0	0	0	0	0	30	0	0	0	0	0	0	2	0	24	0	4	0	Kakinada
6·6	+0·4	7·0	3·30	−0·84	1·62	6	5	−1·5	5·0	−0·4	0	0	2	0	0	7	18	3	0	0	1	2	3	3	10	10	2	0	Visakhapatnam
7·1	+2·1	7·1	3·75	−0·94	1·70	23	9	+2·7	7·9	−0·1	1	1	2	1	1	8	12	4	0	1	0	0	1	13	12	2	1	0	Calingapatam
7·0	+0·4	7·2	1·52	−2·11	1·04	24	4	−2·6	10·1	−0·4	1	0	0	0	1	2	24	1	1	2	0	0	0	0	1	24	2	1	Rentachintala
																													Rayalaseema
6·1	+1·0	6·7	0·27	−2·68	0·14	5	1	−3·8	5·4	−1·4	0	0	0	0	0	0	29	0	1	0	0	0	0	1	0	27	0	2	Cuddapah
6·8	+1·5	6·8	3·01	+1·31	1·98	25	3	−0·3	9·2	+1·3	0	0	0	0	0	0	26	2	2	0	0	0	0	0	0	27	3	0	Bellary
4·2	−1·1	6·2	7·09	+4·16	2·23	5	5	−0·5	12·0	+1·9	0	0	0	0	0	7	15	8	0	2	0	0	1	0	6	10	10	1	Kurnool
5·9	...	6·5	1·43	−0·69	1·05	25	3	−0·3	13·0	...	0	0	0	0	0	3	26	1	0	0	0	0	0	1	4	23	2	0	Anantapur
																													Tamilnad
3·5	+0·6	5·0	0	−0·15	0	...	0	−0·3	11·8	−0·1	0	0	0	0	5	23	2	0	0	0	0	0	9	16	5	0	0	0	Pamban
5·5	+0·3	6·3	0	−1·57	0	...	0	−2·5	6·0	+1·1	1	0	0	0	0	1	17	8	3	0	0	1	0	1	5	21	2	0	Mathurai
6·1	+1·9	6·8	0·05	−1·18	0·05	16	0	−2·2	7·9	+1·4	0	0	0	0	2	11	16	1	0	0	0	0	4	17	7	1	1	0	Nagapattinam
6·0	+1·7	6·9	0·12	−1·50	0·12	7	1	−1·4	20·7 (c)	+4·5	0	0	0	0	0	2	17	11	0	0	0	0	1	1	2	17	9	0	Tiruchi
5·8	+1·3	6·3	0·87	−0·65	0·47	2	2	−2·2	11·7	+5·5	3	3	0	1	10	11	2	0	0	0	2	1	0	5	13	9	0	0	Coimbatore
4·9	0	7·4	2·88	−0·25	1·66	16	5	−0·4	6·5	+2·1	0	0	0	0	3	19	8	0	0	1	1	0	0	5	7	10	5	1	Salem
5·3	...	6·5	1·22	...	0·92	16	3	...	...	...	0	0	0	9	2	6	5	1	7	0	0	0	6	0	7	5	8	4	Kallakurichi
5·3	+1·0	5·4	1·28	−0·11	1·06	16	1	−0·6	7·8	+2·5	0	0	0	0	0	20	10	0	0	0	0	0	18	1	7	3	1	0	Cuddalore
4·7	+0·7	6·0	0·20	−2·57	0·09	1,2	0	−4·9	6·7	+1·4	0	0	0	0	0	2	15	13	0	2	1	0	0	0	2	16	9	0	Vellore
6·1	+1·3	6·4	2·12	+0·26	0·88	23	4	+0·3	13·0	+2·1	0	0	0	0	1	6	20	3	0	0	1	3	14	6	2	2	2	0	Madras
6·7	...	7·1	2·67	...	1·31	1	4	...	9·4	...	0	0	0	0	0	1	16	13	0	1	0	0	0	0	2	16	11	0	Arogyavaram
																													Malabar And South Kanara
7·4	+0·6	7·1	43·63	+6·55	7·80	2	21	−3·6	6·2	+0·8	2	0	7	4	1	6	5	5	0	1	0	1	0	3	7	9	7	2	Mangalore
7·1	+0·3	6·9	28·29	−1·79	5·34	2	25	+0·9	7·5	+2·0	4	11	6	0	1	1	4	3	0	3	3	0	0	0	5	10	9	0	Kozhikode
6·3	...	6·6	19·42	...	2·79	2	24	...	7·5	...	0	0	0	0	0	7	22	1	0	1	0	0	0	0	3	24	2	0	Palghat
																													Mysore
6·1	−0·1	6·0	1·45	−1·14	0·65	18	4	−1·2	9·8	+2·1	0	0	0	0	0	17	13	0	0	0	0	0	0	0	10	20	0	0	Chitaldrug
7·7	+1·5	7·6	1·38	−2·33	0·50	2	4	−5·3	10·5	+3·5	0	0	0	0	0	0	8	20	2	0	0	0	0	0	7	22	1	0	Hassan
6·3	0	7·0	1·07	−1·79	0·61	6	2	−3·9	11·4	+3·2	0	0	0	0	0	11	18	1	0	0	0	0	0	0	7	16	7	0	Bangalore
6·8	+0·6	6·7	1·52	−0·94	0·98	1	4	−1·8	8·9	+0·1	0	0	0	0	0	11	19	0	0	0	0	0	0	0	13	17	0	0	Mysore

(c) Mean of 28 days

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Rela humi %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Travancore–Cochin																					
Fort Cochin ...	10	1008·6	−1·0	1006·5	83·9	−0·3	88	6	75·5	+0·4	72	15	79·2	81·0	76·5	77·0	29·9	+0·7	29·9	88	+2
Alleppey ...	13	1008·6	...	1006·5	85·0	...	88	4 days	75·2	...	72	15,18,19	78·9	81·5	76·8	77·1	30·5	...	29·8	91	...
Trivandrum ...	211	1001·7	−0·6	999·8	84·1	...	87	13	74·6	...	71	15	77·9	81·3	75·6	76·5	29·2	+0·5	29·0	89	+3
Nagercoil ...	195	1001·4	...	999·1	86·0	...	89	4 days	75·9	...	73	2,7,10	79·0	81·8	75·1	75·4	28·0	...	27·1	83	...
Hill Stations Excluding Kashmir																					
Aijal ...	3,599	884·2	...	882·6	75·9	...	82	8	67·5	...	64	2	72·7	73·3	70·2	71·6	24·2	...	26·0	88	...
Shillong ...	4,921	843·7	−1·3	841·5	74·2	−0·3	82	3	64·2	+1·2	62	1,8	68·6	69·9	65·6	66·3	20·3	+0·6	20·7	86	+8
Cherrapunji ...	4,309	862·8	−0·9	860·5	71·5	−0·5	78	9	64·5	+0·2	62	3	67·6	68·5	66·5	67·2	21·9	+0·6	22·0	95	+7
Darjiling ...	7,432	771·4	−1·4	769·4	65·2	+0·3	70	4	56·9	+0·4	51	12,13,14	60·5	60·0	60·1	59·4	17·4	+0·3	17·1	97	+4
Kalimpong ...	3,965	872·3	−1·1	870·5	75·5	+0·3	80	16,19	67·0	+0·7	59	13	69·1	71·7	67·9	69·8	23·8	+0·8	24·0	94	+6
Katmandu ...	4,388	859·7	...	857·1	84·6	−0·2	93	8,9	66·1	−0·6	62	1,3	75·3	77·5	69·1	70·3	22·0	+0·5	22·7	74	+1
Muktesar ...	7,592	767·2	−1·8	765·4	72·1	−1·1	80	8	58·2	+0·2	54	5	62·0	68·9	57·6	60·9	10·4	+0·9	15·1	80	+12
Mussooree ...	6,699	791·3	...	789·6	72·9	−2·2	79	9	61·2	+0·2	57	23	66·9	69·0	61·6	63·6	16·9	+2·4	18·3	76	+8
Simla ...	7,224	776·9	−1·4	775·6	74·7	−0·4	82	8	60·1	0	55	6 days	66·5	71·0	58·3	61·9	13·3	+0·5	15·7	63	+8
Abu ...	3,945	873·3	−0·9	871·2	85·0	+1·4	92	1	67·8	−0·8	65	26,30	72·0	83·3	66·4	68·5	19·9	+0·6	17·7	76	+3
Pachmarhi ...	3,528	886·7	−0·9	883·8	89·6	+1·8	99	1	72·1	+0·1	66	1	76·1	86·9	68·9	71·1	21·2	+0·4	19·7	69	+1
Mahabaleshwar ...	4,534	858·4	−1·2	856·9	71·2	+0·7	80	2,3	62·8	+0·3	61	7,12	64·5	66·6	64·2	66·0	20·3	+0·1	21·6	99	+5
Mercara ...	3,781	882·3	−1·3	881·8	70·5	−1·7	76	6	63·4	+0·2	58	6	65·5	67·6	65·3	66·2	21·2	+0·7	21·4	95	+3
Kodaikanal ...	7,688	769·1	−0·1	767·8	65·6	+1·0	70	28	53·8	+0·6	52	4 days	58·4	59·2	52·9	55·5	11·7	−0·8	13·7	71	−1
Ootacamund ...	7,364	777·5	−0·7	776·2	64·4	+0·3	70	6,27	51·6	−0·8	48	13,26	57·3	58·7	54·5	55·6	13·5	+0·2	13·9	85	+1
Coonoor ...	5,730	823·9	...	...	70·9	−1·7	75	21	58·5	−0·6	52	27	67·9	...	61·7	...	16·5	+1·6	...	72	+6
Tibet																					
Lhasa ...	12,090	619·3	...	...	73·5	...	80	2	49·6	...	45	15	56·3	...	55·0	...	14·1	...	...	94	...
Gyantse ...	13,110	623·6	...	...	69·5	−0·3	78	8	44·1	+2·1	39	3	57·1	...	46·9	...	7·9	−0·1	...	52	−5
Ceylon																					
Colombo ...	24	1008·6	−0·5	1006·4	85·2	−0·8	87	4	77·4	+0·1	74	5,6,7	80·1	81·5	76·6	77·2	29·7	−0·2	29·9	85	+1
Trincomalee ...	24	1005·8	−0·3	1003·3	91·7	−0·7	94	19,30,27	79·4	+0·9	78	3,18,20	82·4	88·0	76·4	76·5	28·3	+0·2	25·9	74	−3
Hambantota ...	61	1006·1	−0·7	1003·9	87·3	+0·6	92	5 days	77·1	+0·2	75	4,11.14	80·3	82·5	76·1	76·0	28·8	−0·5	27·7	82	−2
Mannar ...	12	1006·0	...	1004·1	87·2	...	89	5 days	80·2	...	79	6 days	82·7	83·0	78·2	78·3	31·0	...	31·0	81	...

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Travancore-Cochin
0	+0·6	6·9 (b)	26·92	−1·56	5·13	14	26	+1·7	7·6	+2·9	2	3	8	5	1	1	6	3	1	1	1	1	0	1	2	15	9	0	Fort Cochin
8	...	6·4	24·57	...	2·93	1	23	...	7·9	...	1	5	5	2	0	2	6	7	2	2	2	2	0	0	3	9	12	0	Alleppey
8	+0·2	6·7	7·68	−5·50	1·81	10	16	−1·1	6·9	+1·6	12	0	0	0	0	1	1	12	4	4	1	0	0	0	0	2	23	0	Trivandrum
9	...	7·2	3·29	...	0·84	7	10	...	10·5	...	0	0	0	0	0	1	10	19	0	0	0	0	0	0	0	15	15	0	Nagercoil
																													Hill Stations Excluding Kashmir
7	...	4·6	9·13	...	1·32	24	22	...	6·0	...	0	2	1	9	6	11	1	0	0	0	2	1	2	3	13	6	4	0	Aijal
2	+0·6	7·2	33·94	+15·78	5·72	13	26	+6·0	3·7	+0·9	0	0	1	4	3	6	0	0	16	0	0	1	4	4	4	1	0	16	Shillong
6	+0·4	6·6	123·52	+17·47	18·98	18	27	+2·0	8·9	+3·0	1	5	1	5	9	7	0	2	0	0	5	0	3	8	13	1	0	0	Cherrapunji
5	+0·6	7·4	55·19	+31·01	17·88	12	22	+1·0	6·5	+2·6	0	1	13	10	0	2	4	0	0	0	1	9	8	0	5	5	0	2	Darjiling
1	+0·9	6·8	39·93	+25·38	11·89	12	21	+4·6	4·7	−1·1	2	0	0	3	0	0	1	14	10	1	0	0	23	2	0	0	1	3	Kalimpong
6	+0·2	6·0	14·64	+4·96	4·27	21	16	+0·2	1·0	−0·3	2	3	2	0	0	0	1	1	21	3	5	1	4	0	1	0	5	11	Katmandu
9	+0·8	3·9	11·02	+3·68	2·94	29	14	+3·9	10·3	+1·1	0	1	1	1	0	1	14	9	3	0	0	0	0	0	3	18	9	0	Muktesar
1	+0·1	5·6	5·49	−3·29	1·91	21	7	−3·2	3·4	−2·1	3	2	0	1	5	4	1	1	13	1	2	0	2	12	9	1	0	3	Mussooree
1	+0·6	5·3	10·63	+4·59	2·13	16	13	+3·2	0·9	−2·2	2	5	1	0	2	3	0	2	15	1	0	1	1	5	10	1	1	10	Simla
1	−0·4	1·6	0·53	−4·12	0·44	11	1	−4·8	9·6	+1·6	0	0	0	3	8	13	2	0	4	0	0	0	7	17	5	0	0	1	Abu
4	+0·5	5·5	7·52	−1·52	2·41	24	9	−1·3	3·6	−2·6	1	0	0	1	0	0	22	5	1	0	1	2	0	0	0	15	7	5	Pachmarhi
1	+1·0	7·9	10·09	−32·60	1·34	21	16	−6·2	9·8	−0·4	0	0	0	0	0	26	1	3	0	0	0	0	0	0	25	2	3	0	Mahabaleshwar
4	−0·6	6·4	19·94	−5·56	3·00	2	22	−1·2	8·0	+2·3	0	0	0	0	7	7	8	3	0	0	0	0	0	6	6	9	9	0	Mercara
3	+1·1	7·4	1·35	−2·89	0·26	2	11	+1·1	11·9	+2·5	0	0	0	0	0	0	15	13	2	3	1	0	0	0	0	9	17	0	Kodaikanal
0	−1·2	6·1	2·09	−4·48	0·80	2	4	−10·1	5·6	+0·3	0	0	0	0	0	15	12	0	3	0	0	0	0	0	15	13	0	2	Ootacamund
2	+0·5	...	1·63	−1·18	0·40	1	5	−1·0	3·8	−0·6	3	2	0	4	7	4	6	4	0	...	...	...	...	...	...	...	...	...	Coonoor
																													Tibet
1	...	...	4·91	...	0·85	11	13	...	0	...	0	0	0	0	0	0	0	0	30	...	...	...	...	...	...	...	...	...	Lhasa
9	+0·5	...	2·89	+1·32	0·95	28	7	+2·5	2·2	−1·1	0	1	3	2	0	1	3	1	19	...	...	...	...	...	...	...	...	...	Gyantse
																													Ceylon
9	+0·5	7·0	6·63	−1·74	1·40	8	8	−6·0	...	...	0	0	0	1	3	5	10	1	0	0	0	0	0	1	19	10	0	0	Colombo
1	+2·9	7·5	0	−0·94	0	...	0	−1·6	..	..	0	0	0	0	0	30	0	0	0	0	0	0	0	0	30	0	0	0	Trincomalee
5	+2·2	7·2	1·10	−0·99	0·33	11	4	−1·8	...	...	0	0	0	0	0	9	21	0	0	0	0	0	0	0	8	22	0	0	Hambantota
0	...	6·9	0	...	0	...	0	...	...	...	0	0	0	0	0	10	19	1	0	0	0	0	0	12	18	0	0	0	Mannar

(b) Mean of 29 days

TABLE *III*.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 4TH CLASS STATIONS— JUNE 1950

STATION	Maximum temperature, °F				Minimum temperature, °F				Mean dry bulb temperature 0830 hrs. I.S.T. °F	Mean wet bulb temperature 0830 hrs. I.S.T. °F	Vapour pressure millibars		Relative humidity %		Mean cloud amount, 0830 hrs. I.S.T.	Rainfall, inches				Number of rainy days (0·10″or more)		W
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 0830 hrs. I S.T.	Departure from normal	Mean 0830 hrs. I.S.T.	Departure from normal		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Resultant direction 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Assam																						
Lumding ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8·43	−1·22	1·17	29	19	+5·3	...
Jammu and Kashmir																						
Jammu ...	104·8	+2·3	112	11	82·8	+0·3	72	2	90·0	72·4	19·3	−1·1	40	−4	1·9	1·12	−1·68	0·65	18	2	−1·8	N77E
Kargil (R) ...																						
Mysore																						
Balehonnur ...	76·3	−0·6	83	1	66·2	+0·4	63	17	69·7	68·0	22·8	+0·2	92	0	...	11·57	−5·47	2·76	2	21	−0·1	...
Sikkim ...																						
Lachen ...	..	...	...	...	39·9	...	37	12,21	55·9	...	...	...	...	...	...	16·41	...	2·50	10	29	...	...
Tibet																						
Yatung (Chumbi)	65·1	+1·1	70	4	48·3	−0·5	34	12	60·7	55·8	13·5	+0·1	79	−7	5·0	13·17	+7·45	6·70	12	14	+0·1	...

(R) Register not received

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 5TH CLASS STATIONS— JUNE 1950

Division	Station	Rainfall, inches				Number of rainy days (0.10″ or more)		Division	Station	Rainfall, inches				Num rain (0.10
		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal			Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Assam ...	Mawsynram ...	146·47	...	17·80	17	27	...	Jammu & Kashmir	Sonamarg ...	0·44	−2·45	0·21	26	2
West Bengal ...	Bankura ...	15·29	+4·76	5·00	11	9	−2·1		Gurez ...	0·60	−1·81	0·30	28	3
Bihar ...	Muzaffarpur ...	7·15	−0·55	2·25	27	10	+1·9	Deccan (Desh) ...	Khandala ...	7·98	−25·15	2·04	20	12
	Chapra ...	11·46	+5·53	3·13	28	11	+3·8	Tamilnad ...	Palayamcottai ...	0·18	−0·23	0·18	9	1
	Arrah ...	12·56	+6·36	3·47	26	13	+5·5	Sikkim ...	Thangu ...	9·58	...	2·40	10	23
Punjab (I) ...	Dalhousie ...	4·22	−0·89	1·21	29	9	+2·1		Lachung ...	18·22	+8·16	6·01	12	26
	Kyelang ...	0·10	−0·88	0·10	17	1	−1·4		Chungthang ...	20·62	...	2·57	12	26
	Gondla ...	0·15	...	0·15	17	1	...							
	Koksar ...	0·38	...	0·20	18	2	...							
	Kothi ..	5·82	...	1·15	28	9	...							
	Dharampore ...	5·94	+0·94	1·70	22	11	+4·5							
	Kharsali ...	2·23	...	0·63	21	7	...							
	Rana ...	10·20	...	2·10	14	13	...							
	Jamuna Chetty ...	9·80	...	2·06	14	14	...							

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Note :— Data upto 9·0 Km. a.s.l. are given under Table A and data above 9·0 Km. under Table B.

In tables A & B

n represents the number of observations.

V represents the mean wind speed in m/second irrespective of direction.

v represents the resultant mean velocity in m/second.

D represents the direction of the resultant mean wind in degrees East of North.

For the co-ordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Weather Report-January 1950 and subsequent issues.

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JUNE 1950

STATION	AHMEDABAD												ALLAHABAD										
Time in I.S.T.	0230				0730				1430				0230				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	4·4	3·9	241	30	3·2	3·0	224	30	4·1	3·9	221	30	2·1	0·4	164	30	2·4	0·4	309	30	3·2	1·7
0·15 a.g. ...	30	8·7	8·1	243	30	6·9	6·6	230	30	6·5	6·2	229	30	6·1	1·4	160	29	5·1	1·2	300	29	5·8	3·0
0·6 a.s.l. ...	30	9·7	9·2	243	30	8·8	8·7	241	30	6·5	6·3	232	30	7·3	1·1	197	28	7·1	3·9	282	29	5·6	3·1
1·0 ,, ...	30	9·5	9·1	243	29	10·5	8·5	247	30	7·0	6·8	231	29	6·5	2·3	289	28	8·4	5·7	299	30	5·6	3·5
1·5 ,, ...	29	6·4	5·7	232	23	10·2	9·3	238	28	7·1	6·7	236	28	7·1	4·6	302	27	7·8	5·9	307	28	6·4	5·0
2·0 ,, ...	29	5·4	3·9	254	17	8·4	6·7	223	25	7·6	5·8	253	26	8·2	7·0	314	26	8·1	6·7	313	27	7·5	6·6
2·5 ,, ...	23	5·2	1·4	302	16	6·8	3·3	214	23	7·0	4·5	278	23	9·3	8·6	324	25	8·8	7·9	316	24	9·1	8·0
3·0 ,, ...	19	5·4	0·7	73	9	4·2	0·5	220	19	6·4	3·9	310	21	9·8	9·0	330	23	9·9	8·5	326	24	10·3	9·0
4·0 ,, ...	6	7·3	3·1	67	7	4·5	2·6	28	17	6·0	4·1	343	10	8·1	7·0	335	12	7·3	6·1	340	19	9·3	6·8
5·0 ,, ...	1	9·0	9·0	350	7	7·6	6·1	18	13	7·0	4·6	322					10	5·1	3·7	328	13	9·2	7·0
6·0 ,, ...					5	8·0	5·8	39	12	7·5	4·9	322					9	6·8	2·2	270	11	11·9	7·6
7·5 ,, ...					4	12·8	4·7	13	6	10·7	9·7	303					6	7·7	4·5	226	4	16·9	15·7
9·0 ,, ...					3	15·1	12·0	33	4	8·3	6·6	319					4	9·0	8·9	223	2	10·7	10·2

STATION	AMBALA												ANANTAPUR								ASANSOL		
Time in I.S.T.	0230				0730				1430				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	3·3	2·5	107	30	3·4	2·8	114	30	2·4	0·4	265	30	4·9	4·7	266	30	5·6	5·2	270	30	1·9	1·0
0·15 a.g. ...	30	7·5	3·4	106	30	6·4	3·9	106	30	4·6	1·4	266	30	7·4	7·2	259	30	8·3	7·8	274	26	4·4	2·6
0·6 a.s.l. ...	30	8·0	3·2	120	30	7·7	3·9	128	30	4·4	1·5	269	30	8·3	8·2	263	30	8·7	8·3	273	26	5·6	3·9
1·0 ,, ...	30	5·7	0·8	195	30	6·3	1·7	171	30	4·5	1·9	269	30	12·8	12·5	272	30	9·1	8·8	275	25	5·5	2·9
1·5 ,, ...	28	5·3	2·8	277	29	5·6	3·3	281	29	4·3	2·7	271	27	13·0	12·7	281	30	9·6	9·2	275	22	5·5	2·5
2·0 ,, ...	26	6·4	5·6	289	29	6·0	5·4	300	25	5·3	4·3	294	25	9·7	8·9	290	24	8·9	8·6	277	13	7·1	6·1
2·5 ,, ...	25	7·2	6·5	295	24	6·4	6·0	304	21	6·5	5·7	303	25	7·0	6·2	285	17	8·7	8·4	279	7	5·1	4·3
3·0 ,, ...	21	8·0	7·1	298	21	6·9	6·4	307	19	8·1	7·2	305	20	6·3	5·1	281	13	9·3	7·9	280	7	4·9	3·8
4·0 ,, ...					13	7·0	5·1	307	15	8·3	6·8	303	13	6·2	3·6	259	6	6·0	3·3	317	1	4·0	4·0
5·0 ,, ...					6	3·2	1·2	283	12	6·8	5·8	300	7	4·5	1·9	238	4	3·6	0·4	17			
6·0 ,, ...					6	5·1	2·7	283	11	7·5	5·8	290	5	3·5	2·8	240	2	3·5	1·5	167			
7·5 ,, ...					5	6·4	5·5	299	5	9·0	7·7	278	2	5·7	2·3	15	2	3·0	2·3	75			
9·0 ,, ...					3	9·8	9·3	275	2	15·3	8·2	305	2	6·7	5·9	65	2	2·3	1·7	172			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JUNE 1950

STATION	ASANSOL												BANGALORE											
me in I.S.T.	0730				1100				1430				0230				0730				1430			
leight in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
rface ...	30	2·2	0·9	133	15	2·2	0·9	114	30	2·6	1·2	128	30	4·6	4·4	261	30	4·4	4·3	258	30	5·3	4·9	269
15 a.g. ...	29	4·3	1·2	209	14	4·1	0·9	36	28	4·9	1·9	102	26	8·6	8·5	255	30	8·8	8·7	257	30	7·8	7·3	267
6 a.s.l. ...	28	6·7	2·8	268	14	4·3	0·9	350	27	5·3	2·1	91	...	...	...	...	...	...	...	...	...	...	...	...
0 ,, ...	26	7·4	3·2	283	14	4·5	1·2	330	25	5·5	0·5	104	28	6·6	6·5	251	30	5·9	5·9	256	30	6·7	6·3	268
5 ,, ...	22	6·3	3·8	284	12	5·4	2·4	294	23	7·1	1·9	295	18	14·5	14·4	275	24	12·7	12·5	279	30	8·9	8·7	268
0 ,, ...	19	6·5	4·4	310	10	5·3	3·6	287	20	8·1	4·7	308	18	10·4	9·9	283	15	10·5	9·8	290	25	7·9	7·6	279
5 ,, ...	17	7·9	5·6	320	5	8·7	6·1	288	17	9·1	6·8	309	17	7·3	5·7	286	11	7·9	6·2	293	19	7·8	7·5	282
0 ,, ...	13	7·4	4·5	323	3	11·0	8·1	282	12	9·4	6·9	304	13	6·0	4·6	291	7	6·5	3·9	285	15	6·6	6·5	293
0 ,, ...	1	27·0	9·3	231					6	7·7	4·0	273					5	4·3	1·6	241	8	5·7	4·5	269
0 ,, ...	1	27·0	16·4	215					3	9·7	7·2	282					5	3·9	1·4	202	3	4·3	3·9	338
0 ,, ...	1	24·5	20·3	217					1	9·5	9·5	355					3	4·0	3·4	150	3	4·5	2·5	208
5 ,, ...																	2	4·5	3·5	74	2	6·0	4·6	140
0 ,, ...																	2	6·5	5·2	100				

STATION	BAREILLY								BHAGALPUR												BHOPAL			
ime in I.S.T.	0730				1430				0730				1100				1430				0230			
leight in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
rface ...	30	2·5	1·4	91	30	2·7	0·5	92	30	2·1	1·8	95	15	1·0	0·5	90	30	1·9	1·4	74	30	4·3	3·1	259
15 a.g. ...	30	6·4	2·8	89	29	4·2	0·3	143	27	5·8	5·0	98	13	4·0	3·6	70	28	5·0	3·5	71	29	9·5	8·0	266
6 a.s.l. ...	30	6·8	1·2	139	29	4·9	0·5	235	23	6·6	4·4	120	12	4·3	3·6	96	27	5·8	3·2	89	29	8·6	7·3	264
0 ,, ...	30	6·4	2·2	267	28	5·1	1·3	257	22	6·3	3·1	137	12	4·2	1·1	74	26	5·8	2·0	92	29	10·4	9·3	273
5 ,, ...	29	7·0	4·8	287	28	5·4	3·6	292	18	7·4	2·7	134	11	4·5	1·7	265	24	6·9	0·5	119	29	8·1	7·3	288
0 ,, ...	25	8·0	7·4	299	28	7·4	6·1	301	16	8·6	0·7	163	10	5·6	3·6	275	18	7·7	1·9	285	27	5·5	4·0	290
5 ,, ...	20	7·8	7·3	303	23	9·4	7·7	305	14	8·1	1·8	336	8	7·9	5·8	286	12	8·2	2·5	272	26	4·9	2·3	298
0 ,, ...	15	8·1	7·3	316	17	9·5	8·6	311	13	8·8	3·1	343	8	10·9	8·7	305	9	6·4	1·9	290	26	4·4	2·2	321
0 ,, ...	9	8·1	7·6	338	14	10·6	8·8	309	6	7·3	5·7	313									13	4·5	3·0	2
0 ,, ...	2	2·5	0·1	315	9	11·2	8·9	321	5	6·4	4·1	284					6	7·7	4·2	285	2	4·0	3·1	295
0 ,, ...	2	4·5	2·8	267	7	9·1	6·8	283	4	4·4	0·8	240									1	3·0	3·0	300
5 ,, ...	2	5·0	3·3	225	3	8·3	7·9	236	1	2·5	2·5	155												
0 ,, ...					3	12·0	11·5	255	1	3·0	3·0	240												

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JUNE 1950

STATION	BHOPAL								BHUJ												BIKANER		
Time in I.S.T.	0730				1430				0230				0730				1430				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	5·5	5·1	269	30	4·7	4·0	268	30	4·6	4·5	226	30	3·6	3·5	230	30	5·5	5·3	238	30	3·9	3·5
0·15 a. g. ...	30	8·7	8·3	268	30	6·6	5·9	271	30	10·1	9·9	228	30	9·5	9·3	231	30	10·3	10·1	237	30	9·9	8·9
0·6 a.s.l. ...	30	8·3	7·9	266	30	6·6	5·9	269	30	12·9	12·6	232	29	13·4	13·1	240	30	11·5	11·2	241	30	13·4	11·3
1·0 ,, ...	30	9·8	9·2	283	30	6·8	6·1	278	29	10·5	8·8	237	29	13·0	11·9	245	30	10·2	9·6	243	30	11·9	10·6
1·5 ,, ...	28	7·2	6·5	294	30	6·3	5·9	277	25	8·2	4·5	253	23	11·3	8·7	246	25	9·2	7·7	249	27	7·8	6·7
2·0 ,, ...	27	5·2	3·8	296	30	6·2	5·5	276	24	5·9	1·9	306	14	7·6	4·9	283	19	6·0	3·1	261	23	6·2	4·9
2·5 ,, ...	25	4·6	3·0	295	25	6·1	4·9	286	23	5·7	2·4	356	10	6·9	4·7	306	17	6·2	2·5	298	17	5·9	4·7
3·0 ,, ...	22	4·2	2·3	337	20	5·5	4·0	310	23	6·0	2·9	17	6	6·8	5·7	5	13	5·8	2·5	344	12	5·6	3·6
4·0 ,, ...	18	5·0	2·0	331	11	5·3	3·5	299	18	7·3	6·0	30	5	11·6	11·3	23	12	6·5	4·0	10	8	6·4	4·9
5·0 ,, ...	14	5·8	3·2	255	5	7·0	4·1	262	7	8·9	7·5	35	3	14·2	13·9	31	12	8·0	6·0	360	5	6·9	5·6
6·0 ,, ...	11	6·0	4·0	239	3	7·3	6·5	250	7	9·0	8·7	49	2	16·3	15·5	38	12	9·9	6·9	2	4	11·6	11·2
7·5 ,, ...	8	8·4	7·1	250	1	3·0	3·0	45	1	3·0	3·0	60					9	12·3	6·6	355	3	9·2	2·6
9·0 ,, ...	7	8·2	4·4	253													9	10·9	4·8	327	2	3·5	3·4

STATION	BIKANER				BOMBAY												CALCUTTA						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	3·3	3·1	229	30	4·3	3·4	233	30	4·0	3·4	235	30	6·4	6·0	240	30	4·0	2·8	172	30	5·0	3·9
0·15 a. g. ...	30	7·9	7·3	231	30	6·2	5·6	237	29	5·3	4·6	238	30	7·7	7·5	250	29	8·3	5·6	181	29	6·8	5·0
0·6 a.s.l. ...	30	6·6	6·2	235	28	7·0	6·8	245	27	7·1	6·8	248	30	7·9	7·6	250	27	11·7	9·3	205	26	8·1	5·9
1·0 ,, ...	27	6·1	5·6	238	24	7·2	7·1	248	26	7·5	7·0	249	26	7·9	7·5	248	25	11·5	8·5	206	25	8·8	5·9
1·5 ,, ...	24	5·7	4·9	243	16	6·9	6·6	247	14	6·6	6·3	250	21	6·9	5·9	246	21	8·6	5·0	223	21	8·0	5·9
2·0 ,, ...	19	4·5	3·5	263	9	5·1	3·9	265	10	6·9	6·0	260	13	5·2	2·3	275	15	7·5	3·1	282	20	8·1	4·9
2·5 ,, ...	19	4·6	3·2	283	5	6·4	3·9	291	4	6·3	4·1	271	9	5·2	1·7	326	11	7·5	3·8	335	17	8·7	3·9
3·0 ,, ...	16	5·1	3·8	241	3	4·5	3·8	25	3	6·3	3·1	284	9	4·6	1·9	349	10	8·9	6·9	340	14	8·6	3·9
4·0 ,, ...	14	4·9	3·9	313	2	7·3	6·1	22	1	1·0	1·0	195	7	5·6	4·6	28					2	9·0	1·0
5·0 ,, ...	15	7·2	5·4	344					1	4·0	4·0	200	6	4·0	2·1	343					1	11·5	11·5
6·0 ,, ...	13	8·2	6·0	334					1	2·0	2·0	195	6	5·3	1·1	245					1	9·0	9·0
7·5 ,, ...	9	5·6	3·4	326									6	4·0	2·0	301							
9·0 ,, ...	6	6·0	3·1	330																			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JUNE 1950

STATION	CALCUTTA								COCHIN (Willingdon Island)												COOCH BEHAR			
Time in I.S.T.	1100				1430				0230				0730				1430				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	15	6·0	3·1	161	30	4·6	3·5	160	30	1·5	0·8	281	30	1·6	0·3	263	30	3·7	2·9	271	30	2·1	1·8	78
0·15 a.g. ...	14	7·1	5·7	181	28	5·7	4·1	164	13	4·6	3·4	280	27	3·8	1·6	279	25	5·0	4·4	282	27	5·3	4·7	85
0·6 a.s.l. ...	14	6·3	4·0	196	27	6·8	4·3	178	18	7·9	7·2	289	27	8·2	7·8	285	24	9·3	9·1	288	19	6·9	5·8	101
1·0 ,, ...	13	7·2	3·0	233	26	6·3	3·2	190	15	9·5	9·3	293	26	11·1	10·9	288	20	10·8	10·5	289	17	6·2	4·5	117
1·5 ,, ...	10	6·5	5·3	264	22	6·9	2·2	227	14	10·1	9·9	291	23	11·5	11·2	288	15	11·6	11·4	289	12	5·5	2·8	117
2·0 ,, ...	7	6·0	4·2	270	21	7·4	3·0	261	8	9·2	8·8	290	14	12·8	12·6	287	10	12·7	12·5	294	8	5·3	0·8	194
2·5 ,, ...	3	7·2	6·2	257	17	7·0	4·3	260	4	10·5	9·3	293	4	12·0	11·7	283	3	10·2	9·9	276	5	4·6	1·6	277
3·0 ,, ...	3	5·7	3·8	258	16	7·3	3·9	263	2	8·3	7·7	295	3	12·5	11·9	284	3	12·5	11·9	275	2	8·7	8·5	273
4·0 ,, ...					9	7·1	2·8	279					1	14·0	14·0	265	2	14·7	14·5	265	1	8·5	8·5	285
5·0 ,, ...					6	5·3	3·2	209					1	11·0	11·0	255	1	7·5	7·5	260				
6·0 ,, ...					5	5·4	3·6	230					1	7·5	7·5	285	1	7·5	7·5	275				
7·5 ,, ...					2	7·5	6·9	196																
9·0 ,, ...					1	7·0	7·0	215																

STATION	COOCH BEHAR								CUTTACK															
Time in I.S.T.	1100				1430				0230				0730				1100				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	13	2·4	2·0	79	30	2·4	1·9	93	30	1·4	1·1	236	30	1·7	1·5	244	15	2·1	1·5	239	30	2·1	1·4	225
0·15 a.g. ...	10	4·1	3·8	96	29	4·5	3·7	103	27	6·0	4·7	242	30	6·1	5·1	251	14	6·5	4·3	248	28	6·4	4·7	227
0·6 a.s.l. ...	9	6·0	5·1	100	29	6·5	5·4	107	21	8·6	6·9	266	30	9·3	7·7	276	14	6·9	5·5	255	28	6·3	4·8	260
1·0 ,, ...	8	8·1	5·7	130	28	6·2	4·9	115	20	9·2	7·1	270	29	9·8	8·2	284	13	8·4	6·7	281	28	7·3	6·4	289
1·5 ,, ...	3	6·5	4·0	150	20	6·9	4·4	129	20	7·5	6·1	275	27	9·5	7·6	284	13	8·7	6·9	292	24	7·7	5·5	300
2·0 ,, ...	2	8·0	7·7	125	19	7·6	3·8	137	14	6·0	4·8	282	26	8·1	6·1	290	9	8·6	6·0	301	22	8·5	6·7	310
2·5 ,, ...	1	13·5	13·5	129	13	7·7	3·7	126	11	6·8	4·5	297	22	8·1	5·2	296	2	7·7	5·3	336	19	7·2	4·8	318
3·0 ,, ...					11	8·6	2·9	120	11	5·5	4·2	333	18	7·2	3·4	308	2	7·7	5·1	320	18	7·2	4·1	324
4·0 ,, ...					7	6·7	2·5	184	6	10·3	7·8	298	9	4·1	2·2	291					11	7·3	4·1	271
5·0 ,, ...					4	5·8	3·6	222					5	6·2	3·6	207					4	7·0	5·7	249
6·0 ,, ...					3	5·2	4·0	216					3	4·3	3·6	213					2	4·5	4·0	202
7·5 ,, ...					1	6·5	6·5	220					1	6·0	6·0	180					2	3·3	0·7	268
9·0 ,, ...													1	6·0	6·0	210					2	1·3	1·2	60

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JUNE 1950

STATION	DEOLALI				DIBRUGARH								GADAG										
Time in I.S.T.	0730				0730				1430				0230				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	26	4·6	4·4	245	30	1·7	1·3	42	30	2·9	2·2	49	30	5·3	5·2	246	30	3·9	3·8	251	30	6·3	5·9
0·15 a.g. ...	26	8·6	8·5	244	15	4·1	3·5	50	29	3·7	3·3	52	29	11·1	11·1	253	27	8·8	8·6	255	29	11·2	10·8
0·6 a.s.l. ...	26	5·8	5·7	243	13	6·1	5·7	57	29	3·9	2·4	78	...	...	...	...	...	...	...	...	...	...	...
1·0 ,, ...	26	11·1	11·0	249	11	5·3	4·3	67	26	3·6	1·1	108	25	13·6	13·5	266	26	12·0	11·6	269	29	11·3	11·0
1·5 ,, ...	21	9·8	9·5	256	10	4·5	2·0	126	23	4·6	3·0	212	24	13·6	13·4	279	22	12·9	12·5	282	29	11·2	10·9
2·0 ,, ...	12	5·7	3·0	280	8	4·8	2·8	181	22	5·7	4·4	217	22	10·6	9·6	291	17	10·2	9·9	287	24	8·6	7·7
2·5 ,, ...	7	4·4	0·9	323	7	4·9	3·0	181	21	6·3	5·5	218	20	6·8	5·2	303	16	7·0	4·8	309	13	7·9	5·3
3·0 ,, ...	7	3·6	0·7	79	6	5·5	3·7	193	18	5·6	4·9	212	20	5·3	3·1	313	13	6·3	4·2	326	8	7·7	4·9
4·0 ,, ...	5	4·2	0·5	33	3	6·0	4·4	212	14	6·9	5·5	222	13	4·3	1·8	335	10	5·7	2·3	311	2	7·3	4·2
5·0 ,, ...	4	4·1	0·2	257	2	4·5	2·9	180	12	8·2	6·6	235	7	3·1	2·2	133	8	3·9	1·3	199			
6·0 ,, ...	3	5·8	0·9	59	2	5·7	4·3	189	10	7·7	6·8	255	5	3·3	2·3	254	6	3·6	1·1	118			
7·5 ,, ...	1	3·5	3·5	230					7	8·0	6·7	258					1	2·0	2·0	195			
9·0 ,, ...	1	4·5	4·5	285					5	6·8	6·5	278					1	5·5	5·5	130			

STATION	GAYA																GOPALPUR						
Time in I.S.T.	0230				0730				1100				1430				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	3·1	1·1	85	30	3·0	0·8	107	15	3·9	1·1	33	30	4·1	2·1	13	30	2·8	1·5	212	30	4·7	4·3
0·15 a.g. ...	28	5·3	1·5	154	29	4·4	1·0	142	15	5·9	0·9	16	28	5·9	2·9	8	27	5·7	3·7	233	29	7·8	6·9
0·6 a.s.l. ...	28	6·1	1·4	197	29	5·5	1·7	275	15	5·0	1·2	329	28	6·8	2·9	346	27	6·6	4·8	275	29	5·6	4·7
1·0 ,, ...	25	5·5	1·6	244	28	6·9	2·7	292	14	4·6	3·2	302	26	6·9	2·9	327	26	7·8	6·8	284	28	7·5	6·5
1·5 ,, ...	24	6·6	2·6	283	22	7·4	4·8	299	14	6·3	4·2	309	24	7·3	3·5	307	26	8·6	7·4	295	25	7·8	6·9
2·0 ,, ...	23	7·7	5·1	305	20	8·0	5·3	308	13	6·5	5·1	310	24	8·5	5·2	317	24	8·2	6·5	291	23	8·0	6·4
2·5 ,, ...	14	8·3	5·7	310	17	8·7	6·7	312	9	8·9	6·9	315	22	8·9	6·1	311	14	5·4	4·0	302	21	7·6	5·(
3·0 ,, ...	12	6·5	4·1	320	15	8·9	7·2	319	5	11·0	6·8	312	17	8·5	5·3	313	9	5·8	4·3	299	16	8·1	5·4
4·0 ,, ...					6	5·8	3·7	294					11	8·2	4·7	279	7	4·8	2·0	288	9	5·8	3·8
5·0 ,, ...					3	5·0	3·6	228					6	7·2	2·5	270	4	4·0	3·3	241	8	5·1	3·4
6·0 ,, ...					1	1·0	1·0	90					3	11·0	6·1	267	2	2·7	2·7	244	5	5·9	4·1
7·5 ,, ...					1	5·0	5·0	356					1	14·5	14·5	220	1	3·0	3·0	190	4	4·3	2·7
9·0 ,, ...													1	13·0	13·0	220					1	1·0	1·0

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JUNE 1950

STATION	GORAKHPUR								HYDERABAD (Dn.)												JAGDALPUR			
Time in I.S.T.	0730				1430				0230				0730				1430				0330			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	2·4	1·1	58	30	2·1	0·3	34	30	7·1	6·9	266	30	5·9	5·6	274	30	5·5	5·2	273	30	1·5	1·0	182
0·15 a. g. ...	28	6·3	5·5	84	29	4·0	1·3	57	30	10·9	10·7	267	30	9·4	9·1	279	30	8·0	7·3	277	25	5·9	4·6	221
0·6 a.s.l. ...	23	7·1	4·1	100	29	4·5	2·0	65	30	8·6	8·4	262	30	7·0	6·8	277	30	7·1	6·6	276	25	4·7	3·5	220
1·0 ,, ...	22	6·2	2·0	118	27	4·9	1·5	40	30	14·0	13·3	278	30	13·6	13·1	296	30	7·8	7·2	280	25	7·6	6·7	258
1·5 ,, ...	20	6·9	1·2	304	25	6·4	2·4	325	28	13·4	12·9	287	28	12·6	12·0	306	30	7·9	7·2	286	24	9·4	8·4	274
2·0 ,, ...	19	8·8	4·1	302	24	7·8	4·7	311	28	10·1	9·4	291	28	9·0	8·2	296	30	8·2	7·5	292	23	7·8	6·8	283
2·5 ,, ...	16	8·5	5·1	312	20	9·3	7·9	302	18	6·8	6·4	304	26	5·5	3·9	294	26	8·1	7·4	292	18	6·1	5·2	308
3·0 ,, ...	11	8·0	5·6	307	16	8·1	6·5	305	11	4·9	2·9	309	25	4·3	2·0	301	19	7·8	6·7	298	17	5·6	4·3	312
4·0 ,, ...	7	4·0	1·4	285	7	7·1	3·9	286	5	4·8	1·3	284	24	4·2	2·3	292	4	6·0	5·9	298	8	5·1	1·6	354
5·0 ,, ...	5	3·7	2·7	271	4	4·5	1·7	340	2	4·3	4·2	240	17	4·8	2·4	251	2	5·0	4·7	332	3	5·5	0·7	73
6·0 ,, ...	4	6·1	4·0	252	3	4·0	2·4	244					13	5·6	3·6	273	1	4·0	4·0	330	3	5·3	1·0	156
7·5 ,, ...	3	9·2	8·1	241	2	8·7	6·9	204					5	3·1	1·2	299	1	0·5	0·5	65	2	4·3	2·6	43
9·0 ,, ...	2	5·7	2·9	200	2	9·3	9·0	248					5	4·8	3·7	74	1	4·5	4·5	110				

STATION	JAGDALPUR								JAMSHEDPUR												JHARSUGUDA			
Time in I.S.T.	0730				1430				0730				1100				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·3	1·0	206	30	3·3	2·5	252	30	2·9	1·7	266	15	3·5	1·3	295	30	3·4	1·3	295	30	1·3	0·9	200
0·15 a. g. ...	30	5·0	4·5	224	28	5·7	4·9	259	28	3·9	2·3	263	14	4·1	2·3	306	29	4·9	1·9	294	26	5·6	4·4	223
0·6 a.s.l. ...	30	3·0	2·7	221	28	5·1	4·4	259	27	5·9	3·5	265	14	4·3	2·2	301	28	4·1	2·0	279	25	7·6	6·5	250
1·0 ,, ...	30	8·3	7·7	269	28	5·8	5·1	271	26	7·8	5·4	279	14	6·6	4·0	300	26	4·2	1·9	281	23	9·1	7·7	258
1·5 ,, ...	29	9·1	8·5	285	28	6·7	5·6	288	23	7·0	5·2	289	12	5·3	3·7	295	24	4·9	2·9	303	27	8·0	6·8	267
2·0 ,, ...	29	8·0	7·1	309	27	6·9	5·8	318	19	6·5	3·8	305	11	6·7	4·3	300	22	6·3	4·1	315	18	7·9	6·0	294
2·5 ,, ...	26	6·4	5·8	317	24	6·5	5·3	321	16	6·6	3·9	326	5	6·0	4·2	333	18	6·8	4·9	312	14	7·8	6·2	313
3·0 ,, ...	24	6·7	5·4	332	23	6·3	4·6	316	12	6·9	3·7	340	3	4·5	3·6	356	17	7·4	5·3	311	10	9·1	8·4	329
4·0 ,, ...	20	6·5	3·2	344	17	5·5	3·6	306	5	6·2	1·8	286					9	6·9	3·9	292	4	8·3	7·9	349
5·0 ,, ...	13	5·5	2·7	279	14	6·1	4·9	290	2	5·3	1·3	31					5	6·9	5·1	281				
6·0 ,, ...	9	5·8	4·7	259	8	5·8	4·4	290	2	6·7	1·9	357					3	6·7	5·7	273				
7·5 ,, ...	8	3·8	0·3	152	3	4·5	0·7	213									3	9·7	7·8	274				
9·0 ,, ...	4	6·0	5·3	96	1	5·0	5·0	260									1	3·5	3·5	199				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JUNE 1950

STATION	JHARSUGUDA								JODHPUR												JABALPU		
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	
Surface ...	30	1·4	1·1	226	30	2·0	1·6	241	30	5·8	5·5	228	30	6·0	5·8	226	30	6·3	6·0	227	30	2·3	1
0·15 a.g. ...	30	5·0	4·0	234	29	4·3	3·7	245	30	10·6	9·9	232	30	9·9	9·2	226	30	10·1	9·5	227	29	7·7	6
0·6 a.s.l. ...	28	7·7	6·7	267	29	5·3	4·1	259	30	12·9	12·3	234	30	11·2	10·6	231	30	10·7	10·1	229	29	8·4	7
1·0 ,, ...	26	9·2	8·1	281	27	6·1	4·7	280	30	13·4	13·0	231	29	11·7	10·9	233	29	10·3	9·6	229	29	10·3	9
1·5 ,, ...	25	8·7	7·5	293	22	7·5	6·5	305	25	9·6	8·5	234	25	10·3	8·9	235	20	8·5	7·9	234	29	8·6	7
2·0 ,, ...	24	8·0	6·9	308	21	7·5	6·4	313	16	5·7	3·6	256	17	8·7	6·0	247	16	6·2	4·7	237	26	6·7	5
2·5 ,, ...	21	7·7	5·5	322	19	6·7	5·4	311	13	5·7	2·3	315	12	6·0	3·2	303	14	5·4	1·9	272	19	4·7	3
3·0 ,, ...	19	6·6	4·3	334	18	6·0	4·1	318	12	6·8	4·7	338	8	6·9	5·2	349	12	6·0	3·9	346	19	5·2	3
4·0 ,, ...	15	5·6	3·2	328	13	6·8	5·4	321	6	9·1	5·3	356	5	9·0	8·4	12	11	7·3	5·6	353	4	5·4	3
5·0 ,, ...	6	6·4	2·1	312	10	7·1	5·0	298	1	12·0	12·0	25	4	10·9	8·8	15	9	7·8	6·3	357			
6·0 ,, ...	4	4·5	2·3	266	9	6·1	3·6	287					2	10·0	9·1	343	7	8·0	5·8	336			
7·5 ,, ...	1	6·0	6·0	170	4	4·7	3·9	264									6	10·8	7·8	340			
9·0 ,, ...					2	3·0	1·3	349									4	13·5	11·9	306			

STATION	JABALPUR								MADHOSAGAR												MADR		
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	
Surface ...	30	2·2	1·7	240	30	2·9	2·5	274	30	4·0	3·0	239	30	4·1	2·9	258	30	3·9	2·9	282	30	5·0	
0·15 a.g. ...	30	6·2	5·3	252	30	6·1	5·4	278	28	6·7	4·7	249	30	6·2	4·7	267	30	5·8	4·5	288	30	9·1	
0·6 a s.l. ...	30	7·5	6·7	260	30	6·4	5·6	278	28	7·9	5·9	259	30	7·7	6·3	284	30	5·9	4·7	289	30	11·7	1
1·0 ,, ...	30	11·2	10·4	286	30	6·5	6·1	292	28	8·4	6·7	273	30	8·3	7·4	293	30	5·3	4·2	293	30	10·6	1
1·5 ,, ...	30	10·7	10·0	306	30	7·3	6·8	307	27	6·8	5·9	286	29	7·7	6·7	300	30	6·2	5·2	292	30	8·8	
2·0 ,, ...	30	8·1	7·4	320	29	7·7	7·1	313	25	6·4	5·8	292	24	6·7	5·1	310	27	6·1	4·9	293	29	7·5	
2·5 ,, ...	26	6·3	5·4	329	27	7·6	7·0	325	17	4·8	4·2	301	21	5·9	3·9	312	26	6·6	5·3	293	27	6·9	
3·0 ,, ...	24	6·2	4·6	347	22	6·2	5·1	328	17	5·4	3·8	309	19	6·2	4·1	306	26	6·9	5·3	300	24	6·8	
4·0 ,, ...	19	5·0	2·7	5	14	5·4	4·6	311	5	7·6	6·3	326	11	6·3	4·6	324	15	6·2	4·1	299	16	5·0	
5·0 ,, ...	11	4·2	1·3	282	7	5·6	4·3	304	1	4·0	4·0	290	8	3·9	1·8	348	9	5·2	3·0	265			
6·0 ,, ...	5	3·0	1·1	255	5	7·5	4·4	301					6	4·7	0·9	336	5	3·5	2·4	250			
7·5 ,, ...	4	5·1	1·4	162	2	14·3	14·1	297					6	5·5	1·0	223	1	6·0	6·0	302			
9·0 ,, ...	3	5·0	4·7	77	1	5·0	5·0	360					3	6·0	3·5	138	1	3·0	3·0	360			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JUNE 1950

STATION	MADRAS								MALEGAON												MANGALORE			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	5·4	5·0	263	30	6·0	2·2	251	30	5·7	5·5	266	30	4·2	4·1	266	30	4·2	3·6	277	30	3·8	2·0	260
0·15 a.g. ...	30	9·1	8·7	264	30	8·6	3·2	260	30	12·4	12·3	261	30	8·1	8·0	266	30	6·8	5·8	277	23	5·5	4·2	254
0·6 a.s.l. ...	30	12·3	11·9	280	30	7·1	5·4	272	30	12·4	12·3	261	30	8·1	8·0	266	30	6·8	5·8	277	22	7·2	6·5	264
1·0 ,, ...	30	12·1	11·6	280	30	7·8	7·1	280	30	13·5	13·0	265	30	9·9	9·6	269	30	6·7	5·8	275	14	8·5	8·4	279
1·5 ,, ...	30	9·5	8·8	286	30	8·7	8·1	279	30	12·1	11·0	275	29	9·1	8·0	281	30	6·7	5·9	277	6	7·9	5·9	286
2·0 ,, ...	30	7·1	6·5	278	30	8·8	8·5	277	29	8·3	6·3	309	28	6·5	4·5	310	28	4·9	4·0	281	2	6·0	5·9	297
2·5 ,, ...	29	6·7	5·9	274	25	10·1	9·8	273	29	5·4	3·4	331	27	4·9	2·3	316	27	4·9	3·4	293	2	7·7	7·2	317
3·0 ,, ...	29	7·0	5·6	278	22	11·0	10·6	275	29	4·5	1·9	300	25	5·1	2·5	304	24	4·8	3·2	286	2	7·0	5·5	319
4·0 ,, ...	25	6·6	5·1	257	16	8·8	7·9	269	28	5·7	1·6	356	21	5·5	2·4	342	15	5·9	3·7	334				
5·0 ,, ...	18	4·7	1·9	250	12	5·7	4·8	259					19	4·6	2·6	345	11	5·4	3·4	16				
6·0 ,, ...	15	5·4	2·5	275	9	5·9	3·9	268					16	4·1	2·5	292	9	5·6	2·9	281				
7·5 ,, ...	9	5·1	1·5	42	7	5·3	1·9	58					13	5·5	2·3	210	7	8·0	6·8	252				
9·0 ,, ...	4	7·4	4·9	85	6	8·0	2·1	36					11	5·4	0·8	208	6	6·0	2·7	242				

STATION	MANGALORE								MASULIPATAM												NAGERCOIL			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	3·0	1·8	278	30	3·3	2·5	273	30	3·4	3·1	238	30	2·9	2·5	263	30	4·3	3·4	282	30	5·5	5·1	294
0·15 a.g. ...	24	5·7	4·3	268	23	6·1	5·5	277	29	9·0	8·1	231	29	8·3	7·8	264	30	8·2	6·9	283	30	11·2	11·2	292
0·6 a.s.l. ...	23	8·1	7·0	263	21	7·5	7·2	272	29	11·8	10·8	257	29	14·8	14·4	282	30	9·3	8·7	288	29	19·3	18·1	296
1·0 ,, ...	20	8·3	8·1	275	18	8·8	8·6	284	29	11·5	10·9	270	29	15·4	15·0	291	30	10·3	9·7	287	28	19·0	18·6	293
1·5 ,, ...	8	7·9	7·9	276	13	8·0	7·5	265	29	11·6	11·1	276	29	11·8	11·4	293	30	10·5	9·9	283	27	18·5	18·1	288
2·0 ,, ...	4	8·7	8·3	286	7	8·5	8·0	288	27	9·7	9·1	280	29	8·3	7·7	287	28	10·4	9·7	288	23	18·9	18·0	284
2·5 ,, ...	3	9·7	9·3	300	4	7·7	7·5	283	26	8·6	7·4	290	26	7·1	6·2	292	25	9·7	8·8	290	11	15·2	14·6	278
3·0 ,, ...	2	8·3	8·2	280	2	7·5	7·3	281	24	7·0	6·2	295	26	6·8	4·9	291	25	8·3	7·3	287	10	7·6	6·3	273
4·0 ,, ...	1	3·0	3·0	250	2	9·5	8·9	279	17	5·0	2·8	318	19	5·1	3·2	280	18	7·4	5·8	292	2	5·5	4·9	283
5·0 ,, ...					2	9·5	8·1	277					12	5·8	3·7	301	13	7·2	5·9	288				
6·0 ,, ...					1	7·5	7·5	240					9	4·3	2·7	290	12	6·9	6·3	289				
7·5 ,, ...					1	6·5	6·5	275					5	3·1	1·7	190	10	6·2	4·1	296				
9·0 ,, ...					1	4·5	4·5	345					4	5·4	3·3	115	5	4·5	1·2	280				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JUNE 1950

STATION	NAGERCOIL								NAGPUR								NEW DELHI			
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	5·7	5·2	293	30	8·0	7·5	290	30	3·8	2·3	246	30	3·0	1·9	253	30	2·9	2·2	273	30	3·2	0·9
0·15 a. g. ...	29	9·5	9·2	292	30	14·6	14·3	284	29	7·8	5·6	261	30	6·1	4·7	270	29	5·1	4·2	281	29	8·0	2·8
0·6 a.s.l. ...	28	18·4	17·8	295	30	16·6	16·1	288	29	8·4	6·1	269	30	7·8	7·0	259	29	5·1	4·4	281	28	8·9	4·3
1·0 ,, ...	28	19·7	19·1	293	29	19·9	19·4	292	29	7·7	6·0	281	30	9·5	7·3	303	29	5·0	4·5	288	28	9·0	6·5
1·5 ,, ...	28	17·8	17·2	291	28	20·5	19·7	294	28	6·7	6·2	299	29	8·7	7·6	311	29	5·7	5·0	294	24	7·2	6·4
2·0 ,, ...	27	18·0	17·3	287	23	20·8	19·9	289	26	6·7	6·2	310	27	6·1	5·5	319	29	6·0	4·9	302	20	5·2	4·3
2·5 ,, ...	24	14·5	13·3	272	19	21·4	20·0	284	20	6·3	5·5	326	25	4·9	3·7	348	27	5·6	4·4	312	16	6·1	4·7
3·0 ,, ...	20	10·3	9·1	292	18	17·6	16·9	287	15	5·3	3·9	330	24	4·8	3·6	352	26	4·9	3·9	314	14	6·9	5·1
4·0 ,, ...	10	8·9	8·0	287	11	12·8	11·6	281	6	5·3	2·9	343	17	3·5	2·4	16	21	4·4	3·3	336	5	6·5	4·2
5·0 ,, ...	5	8·6	8·2	264	9	12·9	11·2	274	2	3·3	1·3	283	12	4·2	2·9	264	10	4·9	3·8	287			
6·0 ,, ...	4	7·7	3·5	277	7	13·7	11·1	272	1	3·0	3·0	340	5	4·5	3·8	245	5	4·9	2·5	286			
7·5 ,, ...					1	13·0	13·0	265					3	5·7	2·5	226	1	10·0	10·0	275			
9·0 ,, ...													1	2·5	2·5	74	1	7·0	7·0	256			

STATION	NEW DELHI								POONA												PORT BLAIR		
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	3·9	1·5	271	30	3·5	2·2	289	30	3·3	3·2	282	30	3·7	3·5	280	30	6·9	6·4	291	30	6·2	6·0
0·15 a. g. ...	30	5·6	2·4	268	30	5·5	2·9	306	29	6·9	6·7	261	30	6·3	6·3	256	30	9·6	9·2	263	24	9·2	9·1
0·6 a.s.l. ...	30	8·5	5·9	275	30	5·7	3·5	297	29	5·2	5·0	264	30	4·1	4·1	259	30	7·1	6·7	266	23	13·6	13·3
1·0 ,, ...	27	8·6	6·8	288	29	5·8	4·0	291	29	8·4	8·2	262	30	9·2	9·0	259	30	9·0	8·8	265	17	14·0	13·8
1·5 ,, ...	25	7·3	6·2	290	23	4·5	3·6	287	29	11·0	10·5	268	30	11·1	10·8	267	30	8·9	8·7	265	12	11·0	10·8
2·0 ,, ...	24	6·7	5·7	301	21	5·7	5·3	293	25	8·6	7·1	288	27	9·7	7·9	283	22	8·7	8·1	273	5	10·5	10·4
2·5 ,, ...	18	6·0	5·1	297	19	6·1	5·5	297	17	4·3	2·0	317	16	7·7	4·9	304	12	6·6	4·9	278	3	6·8	6·5
3·0 ,, ...	17	6·5	5·6	307	19	6·4	5·8	301	14	4·9	3·1	358	11	6·3	2·7	341	10	5·4	2·8	281	3	7·8	7·0
4·0 ,, ...	11	6·2	5·1	327	17	6·9	6·2	311	1	1·0	1·0	110	5	4·7	4·0	63	4	5·0	2·9	11	1	3·0	3·0
5·0 ,, ...	7	5·2	3·8	325	14	7·5	6·5	303					4	4·1	1·7	312	2	3·3	2·3	26			
6·0 ,, ...	5	5·7	3·8	316	12	8·4	6·3	286					2	5·3	4·6	243	1	2·0	2·0	220			
7·5 ,, ...	2	11·5	5·6	4	8	10·4	7·1	333					2	3·5	3·3	210							
9·0 ,, ...	1	17·0	17·0	275	7	9·9	8·7	346															

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JUNE 1950

STATION	PORT BLAIR								RAIPUR												TEZPUR			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	4·9	4·7	235	30	5·9	5·7	234	30	3·2	2·7	227	30	3·7	2·5	240	30	3·3	2·6	267	30	1·1	0·8	62
0·15 a.g. ...	27	7·9	7·7	236	29	9·8	9·6	237	19	9·4	8·5	244	29	7·5	7·0	244	30	6·2	5·2	268	19	4·5	2·3	82
0·6 a.s.l. ...	26	12·7	12·5	240	29	12·4	12·1	240	19	9·8	9·0	256	29	10·4	9·9	264	30	7·1	6·0	269	18	3·3	2·4	118
1·0 ,, ...	21	11·8	11·3	246	21	13·5	13·2	245	18	10·0	9·5	279	29	10·7	10·1	278	30	7·1	6·0	281	17	5·2	2·6	178
1·5 ,, ...	19	11·2	10·3	248	14	11·7	11·5	250	19	8·2	7·9	292	29	9·6	8·9	299	29	7·5	6·5	294	13	4·8	3·3	220
2·0 ,, ...	14	9·5	8·1	247	10	11·0	10·6	252	17	7·5	7·2	299	29	8·6	8·1	312	28	6·5	6·0	312	10	4·5	3·8	223
2·5 ,, ...	10	8·7	7·8	246	7	8·2	7·5	253	12	7·2	6·4	310	28	7·5	6·5	326	25	7·1	6·4	320	7	5·2	4·4	224
3·0 ,, ...	7	8·9	7·4	254	6	6·7	5·9	254	7	5·2	4·7	331	26	6·5	5·1	336	20	7·0	5·5	320	6	5·5	4·5	215
4·0 ,, ...	3	10·8	10·7	270	3	7·5	6·3	272					20	6·1	3·2	348	14	6·1	3·9	317	1	1·0	1·0	180
5·0 ,, ...	1	1·5	1·5	180	1	2·0	2·0	180					9	5·2	1·5	296	7	5·7	3·2	280				
6·0 ,, ...					1	4·0	4·0	230					5	5·3	3·2	235	4	6·9	4·3	261				
7·5 ,, ...													1	4·0	4·0	260	4	8·1	7·3	272				
9·0 ,, ...																	3	4·7	3·7	287				

STATION	TEZPUR												TIRUCHIRAPALLI											
Time in I.S.T.	0730				1100				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·3	1·0	78	15	1·5	0·7	87	30	1·0	0·3	95	30	5·5	5·4	271	30	4·9	4·4	274	30	6·5	5·8	277
0·15 a.g. ...	29	5·1	3·5	79	12	5·0	2·7	92	28	3·6	1·6	89	29	10·2	10·1	271	30	8·9	8·7	272	30	9·9	9·4	278
0·6 a.s.l. ...	27	6·1	3·2	116	12	5·7	3·2	98	28	4·1	1·0	132	29	15·4	15·3	273	30	15·6	15·4	274	30	10·6	10·4	271
1·0 ,, ...	23	6·5	2·4	143	11	6·2	2·5	105	28	4·7	1·9	198	29	14·9	14·7	278	30	15·8	15·5	277	30	10·7	10·5	269
1·5 ,, ...	17	5·2	2·4	184	8	8·2	1·9	187	27	6·2	4·3	220	29	10·8	10·5	277	30	12·5	12·1	278	30	11·6	11·3	268
2·0 ,, ...	13	6·3	3·4	205	5	8·2	3·2	206	24	7·4	5·7	222	24	8·7	8·3	274	29	8·7	8·2	277	29	11·8	11·4	271
2·5 ,, ...	9	6·6	3·4	223	3	9·8	7·9	253	21	7·6	6·3	237	18	7·0	6·8	272	27	7·0	6·5	276	28	10·7	10·4	274
3·0 ,, ...	6	7·5	5·5	222	1	5·5	5·5	191	19	7·8	6·5	238	17	7·1	6·3	273	26	7·4	7·0	267	26	10·2	9·9	275
4·0 ,, ...	4	7·6	6·7	225					10	6·6	5·6	238					18	6·7	6·1	275	18	8·1	7·6	283
5·0 ,, ...	4	8·4	7·1	250					8	7·0	6·7	251					10	6·4	4·8	272	9	7·3	6·8	283
6·0 ,, ...	2	5·5	4·9	267					5	8·2	8·2	239					6	4·9	2·1	265	8	4·8	3·2	278
7·5 ,, ...	1	7·0	7·0	335					4	8·5	8·2	254					2	6·3	6·3	72	5	6·8	3·3	100
9·0 ,, ...									3	6·2	5·9	266					2	7·5	7·1	110	3	10·7	9·1	111

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JUNE 1950

STATION	TRIVANDRUM				UDAIPUR												VENGURLA					
Time in I.S.T.	0730				0230				0730				1430				0230				073	
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V
Surface ...	30	1·6	1·4	338	30	3·9	3·5	281	30	3·4	3·0	283	30	4·1	3·3	288	30	2·1	1·6	261	30	2·0
0·15 a. g. ...	26	7·2	6·3	302	30	6·5	6·0	236	30	5·5	5·1	240	30	6·0	5·0	246	20	5·5	4·9	268	28	5·4
0·6 a.s.l. ...	25	12·4	12·0	297	...	...	...	...	...	...	...	...	...	...	...	...	19	7·0	6·5	271	25	8·0
1·0 ,, ...	22	14·3	14·0	296	30	7·1	6·7	244	30	6·8	6·0	252	30	5·9	5·0	246	13	8·4	8·3	283	18	8·5
1·5 ,, ...	15	15·4	15·0	293	30	7·4	7·0	256	28	8·1	6·1	258	30	4·9	4·1	248	8	7·6	7·4	284	12	7·8
2·0 ,, ...	11	17·0	16·4	288	28	4·5	3·1	271	25	4·5	1·7	321	30	4·6	3·5	264	6	5·7	4·7	294	6	6·9
2·5 ,, ...	5	14·1	13·9	287	28	4·1	2·0	321	24	4·6	2·0	348	30	4·9	2·9	330	4	4·5	0·6	297	4	7·1
3·0 ,, ...	5	13·4	12·3	292	26	4·2	2·1	182	24	4·7	2·1	2	30	5·0	2·4	330	4	5·6	2·7	45	1	8·5
4·0 ,, ...	3	6·8	6·5	260	9	4·6	2·8	24	22	5·4	3·3	7	28	6·7	3·6	344	1	4·0	4·0	105	1	12·0
5·0 ,, ...	1	4·0	4·0	170	4	8·6	7·8	27	19	6·8	3·1	36	26	7·8	4·7	351					1	4·5
6·0 ,, ...	1	5·5	5·5	274	2	7·5	7·4	24	13	7·2	9·9	37	24	7·8	4·5	346					1	7·5
7·5 ,, ...									9	5·7	4·0	67	18	6·9	4·1	357					1	5·0
9·0 ,, ...									3	5·2	4·0	313	13	6·0	2·6	360					1	3·0

STATION	VENGURLA				VERAVAL												VISAKHAPATNAM					
Time in I.S.T.	1430				0230				0730				1430				0230				073	
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V
Surface ...	30	3·7	3·4	254	30	7·4	7·1	243	30	6·4	6·0	249	30	6·4	6·1	254	30	2·1	1·7	289	30	1·8
0·15 a. g. ...	28	7·0	6·4	263	30	8·4	8·2	246	30	8·6	8·3	245	30	8·1	8·0	248	29	3·3	4·9	242	28	5·3
0·6 a.s.l. ...	28	9·4	7·9	274	30	9·6	9·5	251	29	10·0	9·8	253	30	9·6	9·5	255	28	8·5	8·1	268	27	8·9
1·0 ,, ...	19	9·5	9·2	275	28	8·5	8·3	249	28	9·7	9·5	253	28	9·1	8·8	255	28	8·4	8·7	268	26	8·9
1·5 ,, ...	19	7·1	6·9	272	18	6·9	5·5	257	16	8·6	7·8	249	24	7·7	7·1	260	27	8·5	8·7	272	25	8·7
2·0 ,, ...	6	7·5	6·8	286	10	4·9	3·2	294	5	3·9	2·2	338	18	6·2	4·4	258	28	3·0	6·1	271	23	7·5
2·5 ,, ...	4	7·9	6·1	320	7	4·0	3·3	350	3	4·2	3·6	343	17	5·5	2·7	274	18	6·3	5·3	290	20	6·5
3·0 ,, ...	2	9·3	6·8	326	4	4·4	4·1	83	2	4·7	4·7	18	16	5·5	1·9	313	9	6·7	5·6	296	17	5·8
4·0 ,, ...	1	5·0	5·0	5	3	6·8	5·2	26	1	3·5	2·5	95	13	6·8	2·9	360	2	5·0	5·0	5	8	4·5
5·0 ,, ...									1	7·0	7·0	315	11	6·7	4·3	347					4	5·0
6·0 ,, ...									1	2·5	2·5	305	9	5·9	3·3	338					2	4·0
7·5 ,, ...									1	8·5	8·5	345	8	10·2	4·8	357						
9·0 ,, ...													6	9·7	3·8	35						

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JUNE 1950

STATION	VISAKHAPATNAM				MINICOY											
Time in I.S.T.	1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	6·1	5·6	199	30	7·6	7·3	277	30	6·7	6·5	274	30	6·9	6·6	275
0·15 a. g. ...	30	5·7	5·2	218	28	9·6	9·5	276	30	9·5	9·3	275	29	9·7	9·5	276
0·6 a.s.l. ...	30	5·1	4·5	260	28	12·2	12·1	280	30	12·4	12·1	278	29	12·1	11·5	279
1·0 ,, ...	29	5·9	5·3	286	27	14·0	13·8	285	26	14·3	14·0	280	27	14·9	14·5	285
1·5 ,, ...	28	7·3	7·0	308	20	15·4	14·9	288	25	14·0	13·6	282	24	15·1	14·7	284
2·0 ,, ...	27	6·5	6·2	305	17	15·5	14·9	286	22	14·1	13·5	280	20	14·9	14·1	282
2·5 ,, ...	26	6·4	5·6	294	11	13·9	13·3	287	11	12·5	11·9	280	15	15·1	14·5	283
3·0 ,, ...	24	5·8	4·8	290	8	10·2	9·4	288	6	9·5	9·3	273	10	14·7	13·3	278
4·0 ,, ...	21	6·9	4·6	283	1	6·5	6·5	355	4	10·2	10·1	287	3	11·2	11·0	263
5·0 ,, ...	13	6·4	4·4	274					1	12·5	12·5	305	2	10·3	9·5	265
6·0 ,, ...	6	5·7	3·4	257									1	8·5	8·5	255
7·5 ,, ...	4	2·6	1·0	149												
9·0 ,, ...	1	4·0	4·0	100												

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

JUNE 1950

Height in Km.	n	V	v	D
		AHMEDABAD		
10	4	9·3	4·3	303
11	2	8·3	8·3	77
12	2	9·3	9·3	80
13	2	9·3	9·3	73
14	2	8·3	8·1	86
15	2	10·3	10·3	82
16	2	11·0	10·9	67
17	1	9·0	9·0	60
		ALLAHABAD		
10	4	7·3	7·0	232
11	1	5·0	5·0	265
12	1	5·0	5·0	230
		AMBALA		
10	2	12·3	12·3	323
11	1	3·5	3·5	295
12	1	5·5	5·5	300
13	1	9·0	9·0	280
14	1	10·5	10·5	315
		ANANTAPUR		
10	3	9·7	9·4	93
11	2	12·7	12·7	80
12	2	19·7	19·7	87
		BAREILLY		
10	3	10·7	10·5	248
11	1	1·5	1·5	290
12	1	3·0	3·0	225
13	1	1·0	1·0	188
14	1	3·0	3·0	330
15	1	5·0	5·0	20
16	1	6·0	6·0	360
17	1	10·0	10·0	360
		BHOPAL		
10	6	7·7	3·1	257
11	5	7·3	2·6	232
12	2	9·7	9·4	86
13	1	7·5	7·5	65
14	1	11·0	11·0	90
15	1	16·5	16·5	85
		BHUJ		
10	8	9·1	3·7	16
11	6	8·2	4·9	57
12	4	9·3	4·5	61
13	4	9·6	6·3	61
14	4	9·6	8·3	70
15	4	12·5	10·9	83
16	3	13·2	12·2	86
17	1	22·0	22·0	60
18	1	22·0	22·0	70
19	1	23·5	23·5	75
20	1	18·0	18·0	70
		BIKANER		
10	8	5·4	2·1	61
11	4	5·5	2·1	29
12	4	6·1	3·2	43
13	3	5·8	3·3	91
14	2	4·3	2·5	34
15	2	6·0	5·3	47
16	2	10·7	10·5	83
17	2	8·0	7·3	49
18	2	7·5	6·7	50
19	2	12·3	10·4	38
20	2	15·0	12·1	39
21	1	15·0	15·0	330
22	1	15·0	15·0	315
23	1	17·5	17·5	315
		BOMBAY		
10	4	3·7	2·1	212
11	2	6·0	2·9	145
12	2	10·3	8·2	165
13	2	8·3	5·6	142
14	1	4·5	4·5	195
		CUTTACK		
10	3	3·3	2·8	168
11	2	2·3	1·5	124
12	2	5·7	5·1	123
13	2	9·5	8·5	152
14	2	12·0	11·1	130
15	2	18·0	16·3	149
16	1	4·5	4·5	110
17	1	13·5	13·5	95
18	1	23·5	23·5	105
19	1	20·0	20·0	105
20	1	16·5	16·5	115
21	1	24·0	24·0	115
22	1	29·5	29·5	115
23	1	31·0	31·0	110
24	1	38·0	38·0	115
25	1	37·0	37·0	110
26	1	41·0	41·0	120
		DIBRUGARH		
10	3	8·5	8·5	290
11	3	11·5	11·5	307
		GORAKHPUR		
10	4	8·7	6·5	231
11	3	7·8	5·1	230
12	2	3·2	2·0	223
		HYDERABAD (Dn.)		
10	4	8·5	8·5	97
11	3	10·0	9·8	108
12	2	16·0	15·7	108
13	1	21·0	21·0	95
14	1	27·0	27·0	95
		JAGDALPUR		
10	5	6·4	5·3	115
11	2	5·7	4·9	141
12	1	7·5	7·5	85
13	1	4·5	4·5	80
14	1	6·5	6·5	45
		JAMSHEDPUR		
10	1	4·0	4·0	200
11	1	3·0	3·0	155
		JHARSUGUDA		
10	1	1·0	1·0	90
		JODHPUR		
10	3	13·5	11·3	286
11	3	14·0	11·6	273
12	3	16·0	14·8	267
13	2	20·5	20·5	256
14	1	20·5	11·1	242
		JABALPUR		
10	2	6·5	5·7	37
11	1	11·5	11·5	80
		MADHOSAGAR		
10	2	5·3	5·2	108
		MADRAS		
10	7	11·0	10·7	85
11	3	18·0	18·0	
12	1	24·0	24·0	
13	1	22·0	22·0	
		MALEGAON		
10	16	7·4	1·6	
11	1	3·5	3·5	
12	1	10·5	10·5	
13	1	15·5	15·5	
14	1	18·0	18·0	
15	1	25·5	25·5	
16	1	26·5	26·5	
		MASULIPATAM		
10	7	9·8	6·3	
11	4	8·9	5·1	
12	3	11·2	9·9	
13	3	12·7	11·8	
14	1	17·5	17·5	
15	1	18·0	18·0	
16	1	17·0	17·0	
17	1	21·0	21·0	
18	1	19·0	19·0	
19	1	23·5	23·5	
20	1	34·0	34·0	
21	1	33·0	33·0	
22	1	32·0	32·0	
23	1	40·0	40·0	
24	1	45·0	45·0	
25	1	44·0	44·0	
26	1	48·0	48·0	
27	1	51·0	51·0	
28	1	46·0	46·0	
		NAGPUR		
10	2	3·7	2·3	
11	1	7·0	7·0	
12	1	10·5	10·5	
		NEW DELHI		
10	5	7·8	4·9	
11	4	6·3	4·1	
12	4	5·3	4·0	
13	4	7·6	5·5	
14	4	8·9	5·9	
15	4	7·7	5·5	

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

JUNE 1950

Height in Km.	n	V	v	D
	NEW DELHI *(Contd.)*			
16	3	9·7	5·5	21
17	3	11·0	11·0	25
18	1	11·0	11·0	60
19	1	16·0	16·0	95
20	1	12·5	12·5	100
21	1	12·5	12·5	90
22	1	19·5	19·5	85
23	1	19·0	19·0	75
24	1	20·0	20·0	65
	RAIPUR			
10	3	5·2	1·9	277
11	1	3·5	3·5	25
12	1	6·0	6·0	115
13	1	8·5	8·5	90
14	1	7·0	7·0	70
	TEZPUR			
10	3	6·3	6·0	243
11	2	4·7	3·8	247
12	1	2·5	2·5	120
13	1	7·0	7·0	50
	TIRUCHIRAPALLI			
10	4	14·6	14·5	87
11	1	13·0	13·0	110
	UDAIPUR			
10	6	6·4	3·0	13
11	4	5·2	1·7	26
12	2	5·5	4·8	67
13	1	3·5	3·5	161
	VENGURLA			
10	1	6·5	6·5	125
11	1	7·0	7·0	125
12	1	6·5	6·5	75
	VERAVAL			
10	3	5·7	1·2	73
11	3	6·0	1·4	232
12	2	4·7	3·8	270
13	1	6·0	6·0	280
14	1	7·0	7·0	285
15	1	4·5	4·5	230
16	1	8·0	8·0	150
17	1	8·0	8·0	120
18	1	10·0	10·0	105

Height in Km.	n	V	v	D
	VISAKHAPATNAM			
10	1	4·5	4·5	90
11	1	3·0	3·0	80

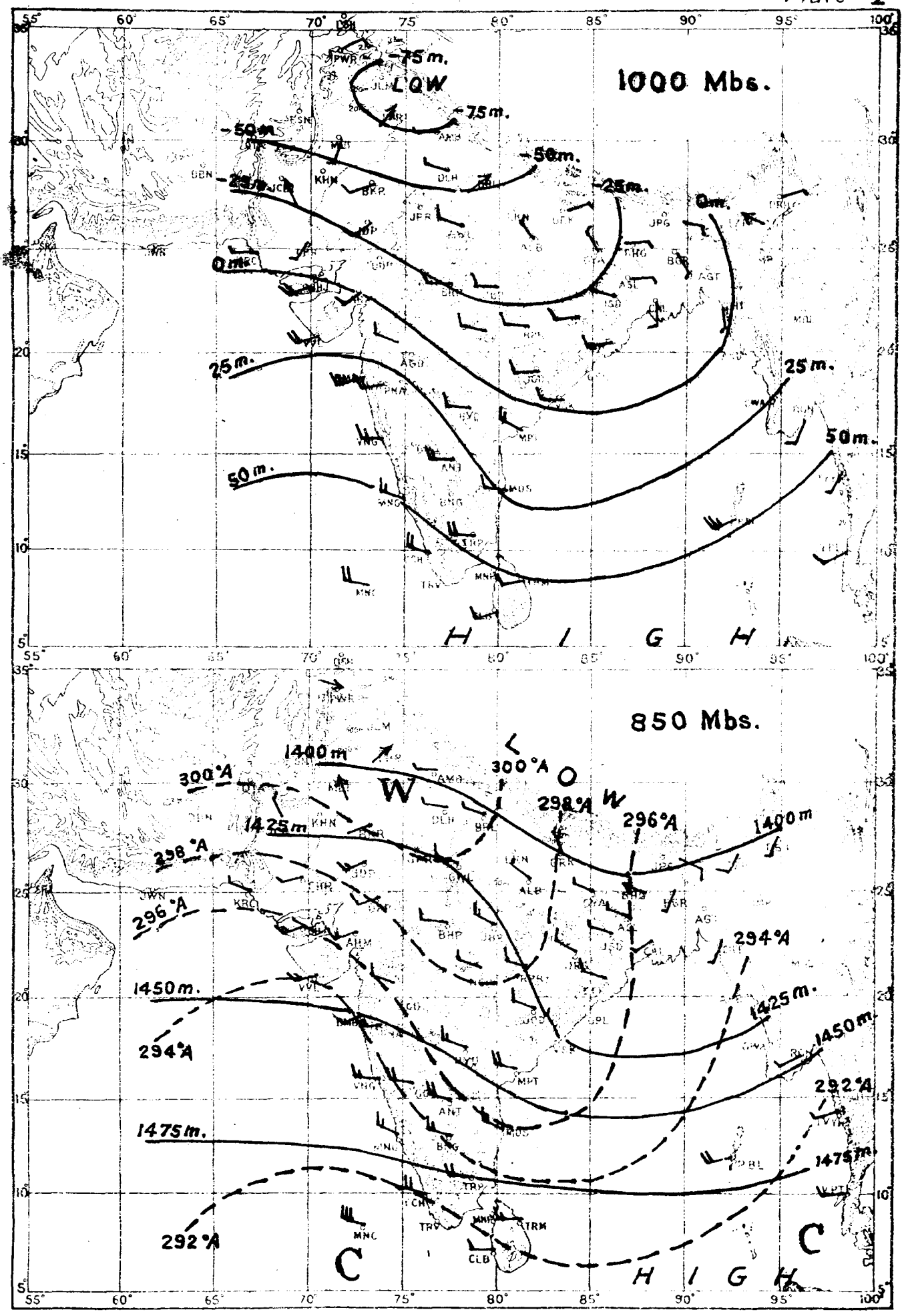
Height in Km.	n	V	v	D

Height in Km.	n	V	v	D

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

JUNE 1950

Plate I



RESULTANT WIND —\= 5 Knots; —\= 10 Knots; —\= 50 Knots.

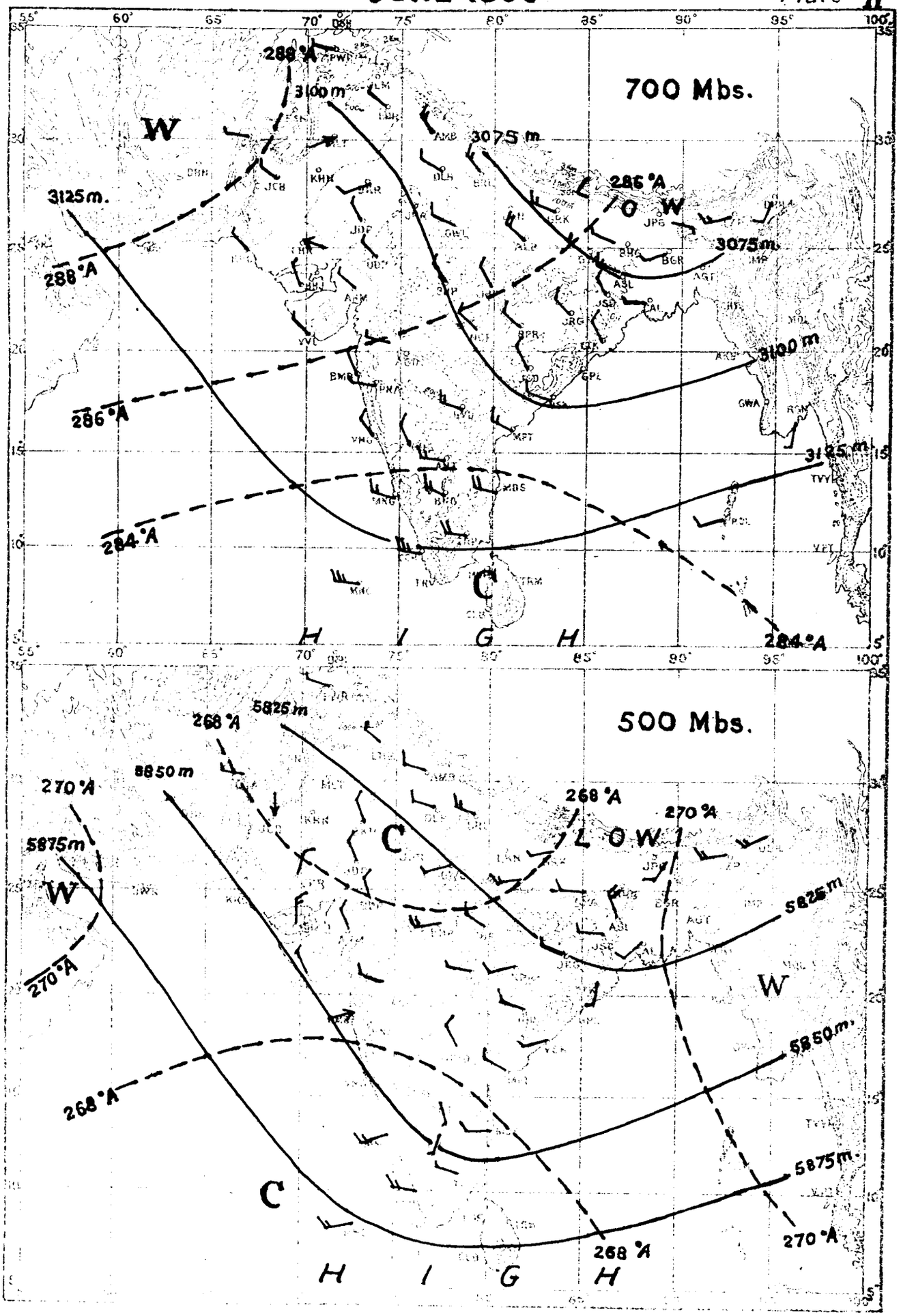
---- Isotherms in degrees absolute. ——— Contours in geopotential metres.

G.P.Z. PRUSSIA, 53.

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

JUNE 1950

Plate II



10 Knots, 50 Knots

Contours in geopotential metres.

Registered No. B-3097

INDIA WEATHER REVIEW, 1950

MONTHLY WEATHER REPORT

JULY

Published by authority of the Government of India

CHIEF FEATURES:—(i) Good monsoon throughout the month giving normal or excess of rainfall over most of the country and (ii) very heavy rains in northern Saurashtra and Kutch in the middle of the month and in Madhya Bharat in the last week.

The monsoon strengthened in the Konkan and east Madhya Pradesh early in the month and continued active in northeast India and east Uttar Pradesh during the first week. In association with a low pressure wave which moved from the Bay of Bengal off the Circars coast to Rajasthan, the monsoon rapidly extended into Vindhya Pradesh, Madhya Bharat, Gujarat and Saurashtra on the 6th, into Rajasthan on the 7th, into west Uttar Pradesh on the 8th and into the Punjab (I) on the 9th. The Arabian Sea branch also strengthened considerably during this period and gave widespread and locally heavy rain in the Konkan, Gujarat and Saurashtra. Rainfall also extended into Deccan (Desh) and Hyderabad.

The monsoon which had established itself over the whole country by the 9th, continued active in the central parts of the country and Uttar Pradesh in association with a shallow depression which moved from the head of the Bay of Bengal to Madhya Bharat between the 11th and 15th. The Arabian Sea branch of the monsoon also was active to strong along the west coast during this period. Under the influence of a 'low' which developed over Rajasthan on the 11th and merged in the seasonal 'low' over Pakistan on the 15th, the monsoon was vigorous over Saurashtra and Kutch on the 13th and caused exceptionally heavy rainfall over that area. Very heavy rain ranging from 6″ to 18″ fell over most of Saurashtra, Rajkot and Bhuj recording falls of 15″ and 14″ respectively during 9 hours ending at 1730 hrs. I.S.T. on the 13th and Gondal reporting a fall of 18″ during the 24 hours ending at 0830 hrs. I.S.T. on the 14th. Due to the heavy rains, most of the rivers in Saurashtra were in spate and caused great damage, the worst affected areas being Morvi, Rajkot, Wankanar, Gondal and Jetpur. Communications were paralysed and over 5000 houses were destroyed or damaged. Fortyfive persons were reported to have lost their lives and over 7000 heads of cattle were washed away by the floods in various parts of Saurashtra. Much damage was also caused to standing crops and stored grains.

Both the branches of the monsoon continued to be active over the country excluding the eastern half of the Peninsula till the 26th of July and well-distributed rain fell over most of the country, the rainfall being heavy along the Konkan and in west Uttar Pradesh and the Punjab (I).

A shallow depression formed in the north Bay of Bengal on the 25th and moved upto Sind by the 31st. It was responsible for active monsoon in Hyderabad, Orissa and Gangetic West Bengal on the 25th and 26th and vigorous monsoon in north Madhya Pradesh on the 28th, in Madhya Bharat on the 28th and 29th and in and near north Gujarat on the 30th. Rainfall was exceptionally heavy in Madhya Bharat.

The continued activity of the monsoon during July made up the deficiency of rainfall during June over most of the country.

The total rainfall for the month was in large excess in west Rajasthan, Gujarat, Saurashtra and Kutch and Mysore and in moderate excess in the Punjab (I), east Rajasthan, Deccan (Desh), Malabar and South Kanara and Travancore-Cochin and in slight excess in west Madhya Pradesh, the Konkan and coastal Andhradesa. It was in slight to moderate defect in Assam, Bihar, east Uttar Pradesh, Rayalaseema and Tamilnad. Elsewhere it was normal. Averaged over the plains of India the rainfall was 16% in excess.

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Both day and night temperatures were normal except in west Rajasthan, Gujarat, Saurashtra and Kutch and Mysore where the day temperatures alone were below normal.

Relative humidity was in excess in northwest India, Madhya Pradesh, Gujarat and Saurashtra and Kutch and normal elsewhere.

Cloud amount was in excess in Punjab (I), north Hyderabad and Tamilnad and normal elsewhere.

Data from Jammu and Kashmir are incomplete.

Table I contains the divisional and sub-divisional means of rainfall, temperatures, humidity and cloud amounts for the 13 chief political divisions and the 28 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 8·30 hours I.S.T. of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 8·30 hours I. S. T. of the date given in the succeeding column.

POONA 5,
dated the 9th March, 1951

C. RAMASWAMY,
for Director General of Observatories

	Rainfall				Departure from normal of				
							0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"	"	"		°	°	mb.	%	
1 Assam (including Manipur and Tripura)	12·75	15·77	-3·02	- 19	+1·0	+0·4	+0·3	+1	+0·4
2 West Bengal ...	15·05	16·11	-1·06	- 7	-1·0	-0·2	-0·1	+2	+0·2
3 Orissa ...	12·27	12·53	-0·26	- 2	-1·2	+0·1	+0·3	+5	+1·1
4 Bihar ...	11·17	12·91	-1·74	- 13	-0·5	+0·1	+0·8	+3	+0·7
5 Uttar Pradesh...	11·59	12·31	-0·72	- 6	-0·4	+0·1	+1·2	+4	+0·6
6 Punjab(I)(including PEPSU and Delhi) ...	10·08	7·25	+2·83	+ 39	-1·9	-0·7	+1·5	+7	+1·0
7 Rajasthan ...	9·93	6·00	+3·93	+ 65	-2·1	-0·8	+1·8	+8	+0·6
Division—Contd.									
8 Madhya Bharat and Vindhya Pradesh	15·57	14·35	+1·22	+ 9	+0·4	0	+0·1	+3	+0·5
9 Madhya Pradesh	15·11	14·48	+0·63	+ 4	-0·9	+0·1	+0·5	+6	+1·1
10 Bombay (including Saurashtra & Kutch)	22·35	14·23	+8·12	+ 57	-1·9	0	+0·6	+6	+0·6
11 Hyderabad ...	6·85	7·23	-0·38	- 5	-0·6	+0·4	+0·2	+4	+1·2
12 Madras (including Travancore-Cochin)	8·20	6·98	+1·22	+ 17	-1·2	-0·2	-0·1	+3	+1·1
13 Mysore ...	15·45	9·97	+5·48	+ 55	-2·3	-0·1	0	+5	+0·5
Mean of India ...	13·00	11·19	+1·81	+ 16	-1·1	-0·1	+0·6	+5	+0·8
Sub-Division									
1 Bay Islands ...	14·43	15·43	-1·00	- 6	-0·9	+0·7	+0·1	+2	+1·2
2 Assam (including Manipur and Tripura)	12·75	15·77	-3·02	- 19	+1·0	+0·4	+0·3	+1	+0·4
3 West Bengal ..	15·05	16·11	-1·06	- 7	-1·0	-0·2	-0·1	+2	+0·2
4 Orissa ...	12·27	12·53	-0·26	- 2	-1·2	+0·1	+0·3	+5	+1·1
5 Chota Nagpur ...	14·27	13·78	+0·49	+ 4	-0·9	-0·4	+0·7	+4	+0·7
6 Bihar ...	9·94	12·56	-2·62	- 21	-0·3	+0·4	+0·9	+3	+0·7
7 Uttar Pradesh, East ...	10·75	12·52	-1·77	- 14	-0·5	+0·2	+0·9	+3	+0·8
8 Uttar Pradesh, West ...	12·43	12·10	+0·33	+ 3	-0·4	0	+1·5	+5	+0·4
9 Punjab (I) (including PEPSU and Delhi)	10·08	7·25	+2·83	+ 39	-1·9	-0·7	+1·5	+7	+1·0
0 Jammu and Kashmir	...	...	Data	incom	plete	...	...	...	...
1 Rajasthan, West	6·49	3·09	+3·40	+110	-2·4	-1·2	+2·6	+10	+0·7
2 Rajasthan, East, (including Ajmer)	13·37	8·90	+4·47	+ 50	-1·9	-0·4	+0·9	+6	+0·6
3 Madhya Bharat	14·63	13·67	+0·96	+ 7	+0·1	+0·1	-0·2	+3	+0·9
4 Vindhya Pradesh	16·83	15·27	+1·56	+ 10	+0·9	-0·1	+0·4	+3	-0·1
Sub-Division—Contd.									
15 Madhya Pradesh, East	13·88	15·37	+1·49	- 10	-1·4	+0·2	+0·2	+6	+1·2
16 Madhya Pradesh, West	15·89	13·92	+1·97	+ 14	-0·5	+0·1	+0·7	+6	+1·1
17 Gujarat ...	23·56	12·03	+11·53	+ 96	-3·7	-0·4	+0·9	+8	+0·7
18 Saurashtra and Kutch ...	18·39	7·95	+10·44	+131	-2·6	-0·8	+0·2	+7	+0·9
19 Konkan ...	37·69	31·21	+6·48	+ 21	-0·8	-0·1	+0·7	+5	+0·2
20 Deccan (Desh)	17·98	12·32	+5·66	+ 46	-0·6	+0·7	+0·5	+4	+0·6
21 Hyderabad, North ...	7·51	8·08	-0·57	- 7	-0·8	+0·4	+0·2	+5	+1·5
22 Hyderabad, South ...	6·20	6·37	-0·17	- 3	-0·3	+0·4	+0·3	+3	+1·0
23 Coastal Andhradesa	6·09	5·07	+1·02	+ 20	-1·5	-1·0	-0·5	+3	+0·4
24 Rayalaseema	2·13	3·18	-1·05	- 33	-1·7	+0·2	+0·9	+5	+1·1
25 Tamilnad	1·58	2·20	-0·62	- 28	-0·9	+0·5	-0·1	+2	+1·7
26 Malabar and South Kanara	47·55	35·68	+11·87	+ 33	-1·4	-1·2	-0·3	+5	+0·7
27 Mysore ...	15·45	9·97	+5·48	+ 55	-2·3	-0·1	0	+5	+0·5
28 Travancore-Cochin	30·43	15·54	+4·89	+ 31	-1·5	-1·3	-0·3	+4	+0·7

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Rel hur
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Bay Islands																				
Port Blair ...	259	998·7	+0·1	996·8	82·9	−0·9	85	7 days	75·8	+0·7	72	17,18,20	80·3	79·2	77·1	76·3	30·6	+0·1	29·5	86
Assam																				
Dibrugarh ...	348	990·3	−0·6	986·6	88·5	+1·2	98	27	75·5	+0·1	72	13	79·2	83·2	77·2	79·2	31·0	−0·3	32·2	91
Sibsagar ...	317	991·7	0	987·6	89·2	0	97	28	77·3	−0·4	74	18	81·2	86·0	78·2	80·0	31·6	−0·9	32·3	87
Tezpur ...	258	993·5	−0·3	989·6	90·2	+0·8	95	28	78·0	+0·4	76	5 days	81·7	86·3	79·2	80·8	33·0	+0·8	33·4	90
Gauhati ...	182	995·4	−0·1	991·7	90·5	+0·8	95	28	78·5	+0·3	76	12,31	83·2	86·0	79·5	80·0	33·0	+0·4	32·3	85
Dhubri ...	115	997·8	+0·1	994·6	87·6	+1·6	92	26	79·8	+1·6	77	2,13	83·8	84·4	79·9	80·6	33·0	+0·7	33·6	84
Silchar ...	96	999·1	−0·6	995·4	90·2	0	94	26,27	77·6	+0·4	75	5,6	81·6	84·8	79·0	79·8	32·9	+0·5	32·5	88
Tura ...	1215	961·1	...	958·2	85·2	...	90	26	75·6	...	73	10	80·3	82·0	76·3	77·0	29·1	...	29·4	82
West Bengal																				
Dum Dum ...	33	998·1	...	995·4	88·7	...	93	11	78·9	...	75	23	83·6	84·0	79·1	79·5	32·0	...	32·4	81
Calcutta ...	21	998·4	−1·0	995·7	89·1	−0·4	93	11,23	79·4	+0·8	77	18,29	83·4	84·4	79·9	80·3	33·4	+0·4	33·4	85
Saugor Island ...	10	998·5	−1·1	996·2	85·5	−1·6	89	10	79·6	−0·5	77	7,8,11	82·8	83·5	79·6	79·6	33·4	0	32·6	86
Sandheads ...	32	998·2	−0·7	995·6	...	...	...	...	...	...	...	...	83·0	83·6	79·8	79·7	33·6	−0·2	32·7	86
Midnapore ...	149	993·5	−1·4	991·2	89·0	−0·7	95	9	77·8	−1·2	75	18	82·6	83·5	79·3	79·7	32·4	+0·3	32·6	86
Contai ...	36	997·1	...	994·6	86·6	...	92	10	79·1	...	76	15	82·2	83·2	79·4	79·9	33·0	...	33·3	88
Burdwan ...	106	995·2	−1·2	992·1	88·9	−1·2	94	10	78·7	−0·3	76	29	82·6	85·0	79·2	80·0	32·4	−0·4	32·7	86
Krishnagar ...	48	997·8	−0·9	995·0	90·0	+0·1	94	10	77·9	−0·7	75	10	83·3	85·4	80·4	81·4	34·0	+0·8	34·8	88
Asansol ...	414	984·8	−0·2	981·8	88·4	−1·4	92	9	78·0	+0·2	74	28	81·9	83·7	79·4	80·5	33·2	+0·7	34·1	89
Berhampore ...	62	997·4	−0·7	994·2	90·0	+0·3	93	8	79·3	+0·4	77	28	84·0	85·4	80·2	80·5	33·2	−0·2	33·2	83
Malda ...	103	996·2	−0·6	993·3	88·5	−1·2	91	11,26,27	79·2	+0·2	77	9	83·6	85·0	79·8	80·3	32·7	−0·9	33·5	84
Cooch Behar ...	145	996·7	...	993·1	90·6	...	96	27	78·4	...	74	6	83·2	86·7	79·0	80·3	32·2	...	32·3	83
Jalpaiguri ...	271	992·1	−0·2	988·1	85·8	−2·8	92	26	76·6	−0·7	74	6,7	80·1	84·1	77·4	79·3	31·2	−1·3	31·7	89
Orissa																				
Balasore ...	65	996·6	−1·6	994·2	87·2	−1·9	92	10	78·6	+0·1	76	4 days	82·8	83·3	79·3	79·2	32·6	+0·4	32·4	85
Chandbali * ...	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puri ...	20	999·0	−0·9	996·7	87·0	−0·3	92	10	80·4	+0·6	77	11,12	83·7	83·5	79·9	80·0	32·8	0	33·4	84
Cuttack ...	87	996·3	−1·5	993·6	87·3	−2·2	94	23	77·9	−0·4	75	17	81·5	83·4	77·9	78·6	31·1	−0·2	30·9	84
Gopalpur ...	56	998·0	−0·9	995·6	87·1	−0·6	93	10	79·1	0	76	26,31	82·7	83·1	78·9	79·6	31·7	−0·3	32·9	83
Angul ...	455	984·1	−1·0	981·4	86·7	−1·5	92	8	77·3	+0·1	75	4 days	80·0	82·3	77·5	78·7	31·4	+1·3	32·0	89
Sambalpur ...	486	982·7	−1·2	980·1	86·5	−0·7	93	6	...	...	...	...	79·0	82·3	76·9	78·2	30·8	+0·6	31·2	91
Jharsuguda ...	726	974·2	...	971·5	...	...	...	...	...	...	...	...	80·0	82·2	77·4	78·8	31·1	...	31·9	89
Titilagarh ...	691	976·7	...	973·8	86·5	...	93	9	76·3	...	72	18	79·6	82·6	75·1	76·4	27·7	...	28·6	79
Chota Nagpur																				
Purulia ...	835	970·9	...	967·9	87·5	...	92	8	77·1	...	74	11	81·0	82·4	78·3	79·3	32·2	...	32·9	88
Jamshedpur ...	423	984·3	−0·7	981·4	88·6	−0·7	94	8,9	78·4	−0·2	76	18,27,30	82·0	83·6	78·2	79·0	30·9	−0·2	32·0	84
Chaibasa ...	742	973·5	−0·8	970·6	88·4	−1·0	93	8,9	77·5	0	75	19	80·9	83·1	77·5	78·7	30·5	+0·3	31·4	85
Ranchi ...	3,150	928·2	+0·3	925·0	84·1	−0·3	88	4 days	72·7	−0·6	70	16	76·5	78·2	74·4	75·3	28·4	+1·1	28·6	91
Hazaribagh ...	2,006	931·9	−0·8	929·4	84·5	−0·7	88	7	73·8	−0·2	73	11 days	77·7	79·5	75·2	76·1	28·8	+1·7	29·3	89
Daltonganj ...	725	973·5	−1·1	970·5	89·7	−1·4	96	7	77·3	−0·8	73	1	83·1	83·9	78·7	79·0	31·4	+1·5	31·5	82
Dhanbad ...	839	970·6	...	...	86·9	...	90	8,11	76·7	...	74	28	80·1	...	77·9	...	32·0	...	...	91
Bihar																				
Purnea ...	124	995·9	−0·3	992·5	89·0	−0·6	92	26,27	79·4	+0·7	75	7	83·3	85·9	80·1	80·8	34·0	+0·7	33·8	86

* Observations not available for a complete month.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from:—																STATION
											0830 hrs. I. S. T.										1730 hrs. I. S. T.								
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs, I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
21	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
7·8	+1·2	7·7	14·43	−1·00	1·71	5	21	+0·5	10·9	−5·0	0	0	0	1	2	22	6	0	0	0	0	0	0	0	1	23	7	0	0	**Bay Islands** Port Blair
7·4	+0·8	4·4	17·91	−3·21	2·62	25	20	−1·3	1·3	+0·3	3	3	2	0	3	3	5	6	6	2	0	1	1	0	0	1	3	23	**Assam** Dibrugarh
7·6	+0·4	5·2	19·02	+1·03	2·97	8	20	+0·3	3·3	+1·1	8	2	3	2	6	5	0	2	3	10	7	1	1	2	2	0	1	7	Sibsagar
6·6	0	4·2	8·82	−4·87	2·01	31	12	−4·9	2·0	+0·3	1	1	15	5	4	0	2	0	3	0	4	11	3	3	1	2	0	7	Tezpur
6·7	+0·3	5·3	12·76	+0·48	4·21	31	9	−6·3	2·2	+0·8	4	6	4	4	3	2	1	2	5	0	3	4	1	2	3	4	1	13	Gauhati
5·5	−0·5	5·2	5·22	−11·97	1·29	17	12	−4·1	3·9	+0·2	2	7	8	5	4	2	0	0	3	1	3	5	3	6	6	1	0	6	Dhubri
7·6	+1·4	7·0	20·73	+0·21	3·78	21	24	+1·3	1·1	−0·6	0	4	4	3	0	1	0	1	18	1	1	1	0	0	4	4	3	17	Silchar
5·7	...	6·9	11·15	...	2·85	9	11	...	4·2	...	1	1	3	1	7	8	1	1	8	0	0	0	1	6	13	0	1	10	Tura
7·3	...	7·0	6·27	...	0·78	16	18	...	7·2	...	0	1	6	10	5	7	1	0	1	1	0	1	6	14	6	1	1	1	**West Bengal** Dum Dum
5·6	−0·4	7·1	11·50	−1·31	1·74	13	21	+3·5	3·6	−0·1	0	1	6	3	5	7	1	1	7	0	0	5	10	9	5	0	0	2	Calcutta
5·0	−1·0	5·9	21·11	+5·67	3·13	30	22	+5·5	14·7	+2·6	2	2	1	5	7	9	2	2	1	0	0	0	6	12	11	1	1	0	Saugor Island
5·7	+0·5	6·8	14·39	+3·44	1·80	17	22	+9·3	...	...	1	0	0	3	6	15	5	1	0	0	0	0	5	6	17	2	0	1	Sandheads
5·8	+1·0	7·2	16·20	+3·46	2·68	30	17	+0·7	3·8	+1·3	0	4	3	3	8	4	1	1	7	1	2	1	4	10	11	1	0	1	Midnapore
5·4	...	6·6	15·06	...	2·94	11	16	...	7·1	...	1	2	0	5	0	12	1	2	8	0	0	0	8	11	8	0	0	4	Contai
5·2	−0·4	6·5	9·66	−3·14	1·60	15	19	+3·0	5·9	+3·3	0	2	10	3	3	9	2	0	2	0	1	9	5	6	8	1	0	1	Burdwan
7·1	+0·5	6·6	10·43	−0·82	3·54	10	18	+1·7	4·2	+0·6	0	2	8	7	13	1	0	0	0	0	1	8	10	9	0	0	1	2	Krishnagar
7·1	+0·3	7·3	14·37	+0·68	2·36	10	21	+3·3	4·8	−0·1	0	0	9	9	5	1	3	0	4	0	1	5	13	2	5	2	0	3	Asansol
7·1	+0·4	7·0	4·55	−6·32	0·62	28	16	−0·1	3·7	+0·3	0	0	14	4	12	0	0	0	1	0	0	9	9	10	2	0	0	1	Berhampore
5·7	+0·9	6·1	12·10	+0·62	1·90	2	16	+1·2	5·1	−0·2	0	2	16	7	5	0	0	0	1	0	0	12	9	4	0	0	0	6	Malda
5·9	...	6·3	15·13	−15·84	4·94	5	19	−1·5	3·3	...	0	4	15	2	4	0	0	1	5	2	2	3	10	6	2	0	0	6	Cooch Behar
5·2	+0·9	5·6	35·26	+3·04	6·48	6	21	−1·3	4·7	+2·7	3	9	14	2	1	0	0	0	2	2	8	6	6	5	0	0	0	4	Jalpaiguri
7·9	+2·0	7·8	14·98	+3·18	3·59	25	15	+0·9	6·6	+2·3	2	3	0	1	2	17	0	3	3	1	0	0	5	5	13	2	4	1	**Orissa** Balasore
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Chandbali *
7·1	+1·3	7·3	7·15	−3·17	1·67	26	13	+1·0	15·1	+3·8	1	0	1	3	1	15	9	1	0	0	1	0	2	3	20	4	1	0	Puri
6·5	+0·3	7·3	8·25	−4·64	1·56	26	18	+2·1	4·1	+1·5	2	0	0	1	1	3	4	4	16	1	0	0	2	4	4	1	4	15	Cuttack
7·1	+2·1	7·5	4·48	−2·68	0·97	24	11	+1·3	9·3	+0·4	1	0	0	1	5	19	2	1	2	1	1	0	1	9	12	3	1	3	Gopalpur
7·3	+1·0	7·3	9·15	−3·32	1·05	20	20	+4·8	5·6	+0·6	0	1	2	2	3	4	10	7	2	0	1	5	3	2	4	9	7	0	Angul
6·6	0	6·5	29·59	+9·03	6·92	27	22	+2·4	5·3	+1·4	0	2	2	1	4	18	4	0	0	0	2	3	0	5	12	8	1	0	Sambalpur
7·7	...	7·7	19·25	...	2·78	26	25	...	...	...	1	1	0	1	3	11	4	0	10	0	0	1	2	2	9	5	1	11	Jharsuguda
6·7	...	6·7	13·57	...	4·15	4	15	...	3·9	...	0	0	0	2	10	13	5	0	1	0	1	0	1	9	11	4	2	3	Titilagarh
6·6	...	7·5	16·23	...	2·02	30	22	...	3·0	...	1	4	2	9	5	4	2	4	0	0	2	3	9	8	7	1	1	0	**Chota Nagpur** Purulia
7·0	−0·1	7·3	11·93	−1·23	1·52	27	19	+1·6	5·3	+1·1	0	1	9	1	0	5	9	1	5	0	2	7	4	3	2	6	1	6	Jamshedpur
7·9	+1·4	7·5	12·59	−0·52	1·90	27	15	−1·2	2·3	−0·2	2	6	0	3	0	13	1	3	3	0	6	0	3	1	12	0	1	8	Chaibasa
7·4	+0·8	7·3	18·17	+2·72	1·90	18	20	+1·5	3·6	−1·4	0	0	4	1	3	1	0	0	22	3	0	7	3	1	0	1	2	14	Ranchi
6·8	−0·3	6·8	12·29	−0·74	1·62	2	19	+1·2	5·4	−0·7	0	1	8	5	4	4	4	4	1	2	3	5	11	3	4	1	2	0	Hazaribagh
6·9	+0·9	6·7	14·40	+1·00	2·23	17	20	+4·4	3·1	−0·5	0	3	7	2	0	3	9	1	6	2	2	6	3	1	1	10	1	5	Daltonganj
...	...	...	20·99	...	3·02	16	22	...	4·9	...	0	1	15	3	1	2	1	0	8	...	...	...	...	...	...	...	...	...	Dhanbad
5·8	+0·9	5·5	31·75	+7·43	7·02	2	19	+2·4	4·3	+1·7	0	0	26	4	0	0	0	0	1	0	1	16	1	0	0	0	0	13	**Bihar** Purnea

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Bihar *(Contd.)*																					
Darbhanga ...	161	994·2	−0·3	991·1	90·8	+1·1	95	27	79·6	+0·2	77	2,3	84·2	87·8	80·7	82·4	34·2	+1·6	35·2	85	+2
Motihari ...	218	992·2	−0·3	989·0	91·0	+0·8	98	12,14	78·6	0	76	1	84·8	86·4	80·7	81·5	34·1	+1·3	34·4	83	+2
Patna ...	173	993·0	−0·6	990·0	90·1	−0·6	94	27	80·4	+0·5	77	14	84·5	86·6	80·1	80·6	32·9	−0·3	33·0	82	+1
Dehri ...	352	986·1	...	983·1	89·8	...	95	7	79·3	...	74	2	82·4	85·9	79·5	78·0	32·9	...	33·0	88	...
Gaya ...	365	985·7	−1·0	982·5	90·6	−1·5	95	7,12	79·4	+0·8	75	18	83·7	86·4	79·4	80·3	32·1	+1·5	32·7	82	+7
Dumka ...	489	981·4	−1·9	980·0	88·4	−1·0	95	12	78·7	+0·7	75	29	81·9	84·1	79·0	81·7	32·4	+0·6	35·7	87	+5
Sabour ...	122	995·0	−0·5	991·9	89·5	−0·8	92	12,26,27	79·8	+0·4	78	5 days	83·6	85 7	80·5	81·0	34·3	+0·7	34·3	87	+4
U. P., East																					
Gonda ...	360	986·5	...	983·6	90·9	−0·4	95	27	79·4	0	75	7	83·6	87·3	79·9	81·0	34·0	+1·2	32·6	84	+2
Gorakhpur ...	254	990·4	−0·5	987·1	91·2	+0·3	96	27	80·0	+0·9	75	7,17	84·5	88·1	80·0	81·4	32·9	+0·1	32·8	82	−1
Azamgarh ...	255	989·4	...	986·4	91·0	...	95	27	81·8	...	76	7	84·5	88·2	81·0	82·6	34·5	...	35·4	86	...
Banaras ...	250	989·6	−0·9	986·3	90·6	−1·6	95	1,7	79·6	−0·1	75	1	83·5	87·4	80·5	81·6	34·2	+2·0	33·8	88	+8
Allahabad (Bamrauli) ...	322	987·0	−1·0	983·9	91·5	−0·6	99	1,7	79·3	−0·5	75	1	83·3	87·2	79·6	80·8	33·4	+1·1	33·1	84	+5
Fatehpur ...	375	985·4	...	982·1	92·5	−0·6	103	3	80·3	+0·6	77	15	83·3	88·2	80·0	81·4	33·2	0	33·2	85	+4
Banda ..	398	984·4	...	980·6	93·5	...	107	3	80·0	...	75	24	94·6	87·8	80·2	81·3	33·1	...	33·5	78	...
Kanpur ...	414	984·6	−0·1	981·2	92·6	+0·2	99	1,2,3	80·0	+0·1	76	7	83·9	88·2	79·8	80·5	33·2	+1·2	32·1	83	0
Lucknow ...	371	987·2	+0·9	983·2	91·4	−1·0	97	1	79·5	0	71	24	83·3	87·7	80·5	80·4	33·6	+1·4	32·9	88	+9
Bahraich ...	407	985·9	+0·7	982·7	91·6	−0·3	95	4 days	79·9	+0·8	76	7	85·2	88·3	80·0	80·8	32·5	+0·5	33·3	79	−1
U. P., West																					
Jhansi ...	823	970·6	−0·9	967·1	93·1	+0·4	107	1	79·3	+0·7	76	29,30	82·1	87·4	77·3	78·9	29·6	0	29·8	80	+4
Agra ...	553	979·3	−0·5	976·3	94·1	+0·3	106	1,2,3	80·6	+0·2	74	10	84·5	88·1	79·4	80·4	31·7	+1·2	32·1	80	+6
Mainpuri ...	516	980·9	−0·3	977·1	94·4	−0·7	107	2	80·4	+0·1	76	16	84·3	89·7	81·5	83·8	35·5	+4·0	36·6	88	+1
Aligarh ...	615	977·3	..	974·5	92·9	+3·7	106	2	79·6	−0·4	73	10	84·5	88·6	80·0	80·8	32·9	+1·5	32·3	82	+4
Bareilly ...	568	979·3	−0·5	976·2	91·7	−0·4	98	1,2	79·3	+0·4	76	11,12	83·7	87·6	79·7	80·4	32·7	+0·7	32·2	84	+2
Meerut ...	728	973·8	...	...	91·8	...	105	1	78·1	...	76	5 days	83·3	...	78·8	...	31·3	...	...	82	...
Roorkee ...	899	968·5	−0·2	965·1	91·1	−1·0	104	2	77·4	−0·7	74	22,23	81·7	87·5	78·1	80·8	31·7	+1·9	33·8	85	+7
Dehra Dun ...	2239	925·3	+0·1	922·7	86·3	+0·1	92	28	73·4	−0·4	70	4	78·2	83·0	75·0	76·8	28·4	+1·3	29·2	86	+2
Punjab (I)																					
New Delhi ...	710	974·0	−0·6	971·0	93·1	−2·2	105	1	80·0	−0·9	75	6	84·3	88·4	78·8	80·2	31·1	−0·5	31·4	78	+4
Hissar ...	725	973·4	−0·2	970·7	96·5	−3·1	109	3,4	80·6	−0·6	75	23	84·8	92·5	79·7	81·4	32·7	+3·3	31·1	80	+1
Karnal ...	818	971·0	...	967·6	91·5	...	105	1,2	78·4	...	72	24	82·6	88·9	77·9	79·5	31·3	...	30·0	81	...
Ambala ...	892	967·9	−0·6	965·1	94·3	−1·2	108	2	77·8	−1·3	74	9,11,28	82·6	86·5	78·7	80·9	31·6	+1·3	34·2	81	+5
Patiala ...	822	970·3	...	967·1	93·5	...	106	1,2	79·3	...	74	12	83·2	89·2	79·2	81·2	32·0	...	32·5	83	...
Ludhiana ...	811	970·9	0	967·8	96·2	−1·1	109	2	80·4	+0·1	75	12,13	85·4	91·8	79·1	80·7	30·6	+1·5	31·1	76	+4
Ferozepore ...	657	975·3	...	972·6	96·3	...	106	1,3,4	80·4	...	71	11	85·4	90·6	78·4	79·6	29·6	...	30·0	73	...
Amritsar ...	769	971·8	...	968·9	94·1	...	107	2,3,4	79·5	...	72	4	84·3	81·3	80·0	81·7	33·6	...	33·5	82	...
Jammu & Kashmir																					
Srinagar ...	5,205	833·9	−0·3	830·3	87·2	−0·6	93	8	68·0	+3·7	62	1	73·9	84·5	68·5	71·4	21·7	+1·3	21·2	78	−1
Gulmarg ...	8,709	735·9	−0·4	...	69·4	−1·3	75	6	52·2	+0·6	47	1,2	63·5	...	59·7	...	16·3	+2·2	...	81	+7
Dras (R) ...	10,059																				
Leh ...	11,529	664·1	−0·5	660·3	77·8	+1·4	85	31	52·3	+2·0	45	1	62·7	72·7	51·0	55·8	9·2	+0·1	9·5	47	−6
Skardu (R) ...	7,505																				
Gilgit (R) ...	4,890																				
Misgar (R) ...	10,190																				

(R) Register not received.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from ;—																	STATION
											0830 hrs. I. S. T.									1730 hrs. I. S. T.								
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
1	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bihar *(Contd.)*
6	+0·5	4·6	8·16	−3·96	2·04	2	13	−0·9	4·4	+0·9	0	15	12	4	0	0	0	0	0	0	3	12	10	0	0	0	0	6	Darbhanga
2	+1·2	4·5	7·64	−7·36	2·90	1	11	−3·1	4·4	−0·1	0	0	29	1	0	0	0	0	1	0	0	22	1	0	0	0	1	7	Motihari
4	−0·2	6·0	5·74	−5·84	2·63	18	13	−1·7	6·0	+1·7	1	16	8	6	0	0	0	0	0	1	14	7	4	2	0	0	1	2	Patna
2	...	6·8	13·31	+1·79	2·05	29	17	+2·8	3·8	...	0	6	7	8	2	4	0	3	1	1	7	7	4	0	3	0	6	3	Dehri
7	+1·5	6·9	7·08	−6·13	1·12	18	12	−3·8	6·1	+0·4	0	3	17	2	1	3	1	1	3	1	8	12	3	1	1	1	2	2	Gaya
4	−2·4	5·2	13·95	+0·13	3·56	14	21	+3·0	4·5	+2·2	1	4	5	19	1	1	0	0	0	0	5	8	15	2	1	0	0	0	Dumka
9	+0·2	6·4	8·09	−1·87	1·92	15	10	−5·1	6·6	+0·6	0	0	25	6	0	0	0	0	0	2	0	17	12	0	0	0	0	0	Sabour
																													U. P., East
3	−0·8	5·0	8·68	−5·99	2·23	7	12	−2·0	4·0	+0·3	0	1	19	5	0	0	0	0	6	0	0	8	7	0	0	0	0	15	Gonda
6	+0·8	4·2	14·62	+0·99	6·07	17	14	−0·3	4·0	+1·7	0	3	23	2	0	0	0	1	2	0	2	22	1	0	0	0	0	6	Gorakhpur
1	...	5·4	7·20	...	1·32	25	16	...	...	...	0	0	20	1	0	0	0	0	10	0	0	13	1	0	0	0	0	17	Azamgarh
2	−0·1	5·9	11·76	−0·05	3·18	4	14	−0·3	5·4	+1·9	3	6	12	2	0	5	1	0	2	2	4	12	2	0	1	5	4	1	Banaras
2	+0·7	7·0	12·48	−0·08	2·58	19	16	+0·8	4·6	−0·2	0	5	14	4	0	1	3	2	2	2	9	7	2	2	2	4	2	1	Allahabad
1	+0·5	6·4	14·74	+2·21	5·71	15	13	−0·9	3·8	+0·2	0	0	15	3	1	1	2	1	8	1	3	11	2	0	1	6	0	7	(Bamrauli) Fatehpur
8	...	6·9	8·70	...	1·37	20	14	...	3·3	...	3	3	7	0	5	3	3	1	1	0	5	4	1	4	8	4	3	2	Banda
8	+2·3	6·7	7·64	−3·11	2·00	17	10	−2·5	6·0	−1·3	0	4	14	3	0	1	2	3	4	2	8	11	2	0	1	4	1	2	Kanpur
9	+1·1	5·9	8·56	−3·44	1·74	9	14	+0·6	2·9	+0·7	1	2	12	11	1	0	1	0	3	0	2	18	3	2	0	3	0	3	Lucknow
3	+1·8	5·9	7·49	−4·75	3·51	24	7	−4·9	5·5	+2·7	0	1	15	13	0	0	0	0	2	0	1	12	12	0	0	1	1	4	Bahraich
																													U. P., West
7	0	5·3	8·49	−3·32	2·60	21	10	−3·8	5·0	+0·8	2	5	3	0	0	5	5	1	10	1	4	3	2	0	3	5	2	11	Jhansi
0	−0·3	5·0	7·61	−0·94	2·17	18	13	+2·0	2·6	−1·8	0	1	0	0	0	0	1	0	29	0	7	1	2	3	1	2	1	14	Agra
5	+1·2	6·0	9·27	+1·73	2·00	15	12	+1·6	3·3	+1·1	0	3	11	8	1	1	4	1	2	0	3	9	8	0	3	1	2	5	Mainpuri
9	+1·1	6·2	13·12	+4·35	2·67	6	13	+2·7	...	...	0	0	12	1	0	0	0	1	17	0	0	7	0	0	0	1	1	22	Aligarh
3	+0·5	6·6	7·71	−5·25	1·65	5	14	+1·2	3·3	+1·1	0	4	12	11	1	1	0	0	2	2	2	16	4	1	1	0	1	4	Bareilly
0	...	...	13·47	+4·88	2·29	22	18	+7·7	5·3	...	0	2	11	5	1	0	0	2	10	...	...	...	...	...	...	...	...	...	Meerut
2	+0·1	4·2	13·74	+1·44	2·82	22	18	+6·1	3·6	+1·1	1	0	0	22	0	0	0	0	8	0	0	1	19	0	2	0	0	9	Roorkee
3	+0·1	5·3	26·05	−0·25	2·84	31	23	+2·7	1·8	+0·2	1	3	0	4	2	4	3	0	14	0	4	0	3	3	4	5	0	12	Dehra Dun
																													Punjab (I)
1	+1·1	6·2	17·92	+10·89	4·96	22	14	+5·0	5·5	...	1	0	10	7	1	2	3	0	7	1	2	11	5	1	2	1	1	7	New Delhi
0	+0·2	3·2	7·15	+2·87	1·76	18	8	+3·0	5·7	+0·2	1	4	6	9	5	3	2	0	1	2	9	3	6	4	2	3	1	1	Hissar
2	...	5·6	14·57	...	5·16	22	13	...	2·9	...	3	5	6	16	1	0	0	1	1	1	2	8	11	1	2	1	0	5	Karnal
5	+0·7	3·9	8·94	−0·67	2·45	28	12	+1·4	5·6	+2·5	0	0	3	2	0	0	0	0	26	0	0	8	3	0	0	1	0	19	Ambala
9	...	5·2	5·97	...	1·07	11	9	...	5·0	...	1	1	8	18	1	0	0	1	1	2	1	7	15	2	0	2	1	1	Patiala
0	+2·1	6·4	6·31	−1·76	1·98	25	10	+1·6	2·5	+0·5	0	1	7	12	1	3	0	1	6	0	1	0	16	0	6	0	3	5	Ludhiana
2	...	4·8	3·94	...	1·04	13	10	...	1·9	...	1	2	1	8	7	6	1	1	4	0	7	1	2	4	8	1	4	3	Ferozepore
3	...	4·6	13·10	...	3·47	19	12	...	4·7	...	1	4	9	12	3	1	1	0	0	2	6	8	5	4	1	1	1	3	Amritsar
																													Jammu & Kashmir
7	+1·3	3·8	3·66	+1·33	1·05	21	5	+0·1	2·2	−0·3	3	11	4	7	0	4	2	2	8	1	0	1	6	0	2	1	11	9	Srinagar
6	+1·8	...	3·22	−0·84	0·72	27	10	−7·9	3·1	−0·1	4	11	2	4	2	2	2	3	1	...	...	..	...	...	...	...	...	...	Gulmarg
																													Dras (R)
4	−0·3	4·4	0·14	−0·33	0·08	19	0	−1·4	4·0	+2·1	0	1	0	1	1	3	0	0	25	0	6	0	1	0	8	6	0	10	Leh
																													Skardu (R)
																													Gilgit (R)
																													Misgar (R)

STATION	Height of bar cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature. °F		Wet bulb temperature, °F		Vapour pressure, millibars			Re hun	
		Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Rajasthan, West																					
Sri Ganganagar ...	580	976·8	...	973·8	97·7	−4·4	106	4, 5	79·6	−2·9	75	9,17.18	86·8	93·4	81·2	80·9	33·9	+6·7	30·3	79	+
Bikaner ...	734	972·3	−0·9	969·9	97·9	−3·4	110	7	80·9	−1·5	77	6 days	85·5	93·9	78·1	78·4	29·3	+1·1	26·2	72	
Jaisalmer ...	793	969·8	...	966·3	99·9	...	108	6	80·3	...	77	4	83·2	96·1	79·2	83·9	32·2	...	32·7	82	
Jodhpur ...	736	973·5	+0·6	969·8	94·5	−2·4	109	6	79·6	−0·6	75	11,30	81·9	92·3	77·2	79·4	29·9	+2·2	27·9	80	+
Phalodi ...	783	971·4	...	968·2	98·7	...	111	9	80·3	...	72	12	83·5	94·6	77·5	81·5	29·5	...	30·9	78	
Barmer ...	638	976·4	−0·6	972·8	97·1	+0·6	108	6	79·2	+0·3	76	30, 31	82·5	93·2	77·6	80·1	29·9	+0·5	29·1	80	
Rajasthan, East																					
Sikar ...	1419	950·7	...	947·7	94·9	...	105	6,7	77·5	...	72	9	82·4	87·4	77·7	79·9	30·5	...	31·4	81	
Jaipur ...	1431	950·3	−1·4	947·4	90·6	−3·6	102	1, 4	77·9	−0·3	73	30	81·4	85·7	76·4	77·4	30·3	+2·4	28·3	80	
Ajmer ...	1593	945·1	−1·3	942·1	90·2	−1·5	104	6	77·2	−1·2	73	12,30	79·9	86·7	74·7	76·3	27·6	+0·5	26·6	79	
Kotah ...	843	969·4	−1·5	966·8	91·2	−2·7	103	1, 7	79·3	−0·6	75	24,25	81·9	86·8	76·8	78·6	29·2	+1·1	29·8	80	+
Jhalawar ...	1053	962·5	−1·9	959·6	90·4	+0·4	103	1	77·3	+0·6	74	24,29,30	80·0	86·2	75·9	79·7	28·8	−0·4	28·3	83	
Udaipur ...	1910	935·1	...	932·8	85·9	...	96	6,7	74·6	...	72	4 days	77·5	82·4	73·3	75·0	25·8	...	25·8	82	
Madhya Bharat																					
Gwalior ...	681	974·4	...	971·6	93·2	...	107	1	79·7	...	75	24	84·3	87·1	78·5	79·0	30·6	...	30·3	78	
Guna ...	1571	945·7	−1·6	943·4	89·4	+1·4	103	1	75·3	+0·1	72	20,22	78·6	84·1	74·5	76·2	27·5	−0·5	27·6	83	
Neemuch ...	1626	944·8	−1·3	942·2	87·2	−0·8	98	1,5,6	74·6	0	72	4 days	76·9	82·9	74·3	76·0	27·9	+0·8	27·6	88	+
Ratlam ...	1596	946·4	...	943·4	83·8	...	95	1	73·2	...	70	16	74·4	80·1	73·3	76·5	27·2	...	29·2	94	
Indore ...	1839	938·3	−1·6	935·6	84·8	−1·1	97	1,2	72·6	+0·1	70	29,30	74·7	80·4	72·7	74·6	26·6	−1·0	26·9	92	+
Bhopal ...	1643	944·2	−1·8	941·3	86·5	+0·9	99	4	74·1	0	71	29	76·7	81·8	73·5	75·1	26·8	−0·1	26·9	86	+
Bairagarh ...	1714	941·9	−1·5	939·1	87·7	+2·1	100	4	73·6	−0·5	65	29	76·4	82·2	73·6	76·1	27·3	−0·2	27·8	88	+
Madhosagar ...	757	972·2	...	969·3	92·3	...	106	1	79·7	...	75	25	83·8	87·2	78·3	78·9	30·6	...	30·0	79	
Vindhya Pradesh																					
Nowgong ...	750	972·8	−1·2	969·5	91·4	+0·4	104	3	78·2	−0·4	75	22	82·5	87·0	77·6	79·6	30·1	+0·1	31·2	81	+
Sutna ...	1041	962·9	−1·2	959·7	90·5	+1·7	105	3	77·3	−0·1	72	8	81·6	85·3	77·7	79·3	31·1	+1·7	31·5	84	+
Umaria ...	1506	947·7	...	945·2	87·0	+0·5	98	3	75·5	+0·3	72	1,18,28	78·8	81·9	75·1	76·4	28·2	−0·5	28·8	85	+
Madhya Pradesh East																					
Gondia ...	1026	965·2	...	962·6	84·3	...	94	3	75·2	...	72	16	77·4	81·6	75·2	77·2	28·8	...	29·9	90	
Pendra ...	2040	930·6	−1·3	927·9	83·5	0	90	3	73·2	+0·8	70	18	76·5	79·6	73·8	75·1	27·4	+0·4	27·9	88	+
Champa ...	805	972·1	...	969·0	87·3	...	93	4	76·0	...	72	18	78·4	83·3	76·4	78·2	30·1	...	30·7	91	
Raipur ...	979	966·4	−1·3	963·5	85·0	−1·7	99	5	75·1	+0·1	73	4 days	77·4	83·0	74·7	76·5	28·0	−0·6	28·2	89	
Kanker ...	1318	956·2	−0·5	953·6	82·7	−1·3	89	4	75·0	+1·1	72	1,15,17	77·5	80·6	74·9	77·1	28·4	+1·4	30·2	89	
Chanda ...	631	979·8	−1·0	976·4	86·2	−2·2	98	4	75·1	−0·7	73	1,26	78·2	82·8	74·3	76·9	27·7	−0·1	29·4	83	
Jagdalpur ...	1815	940·0	−1·3	937·3	80·9	−2·0	86	7	71·4	−0·5	68	18	74·5	77·4	72·6	73·9	26·6	−0·1	27·2	92	
Madhya Pradesh West																					
Buldhana ...	2133	929·9	...	927·3	84·1	...	94	2	71·4	...	69	18,30	73·3	80·0	70·3	72·4	24·1	...	24·1	86	
Akola ...	925	969·6	−1·4	966·3	89·2	+0·1	101	2	75·3	+0·5	73	4days	77·8	83·9	74·1	75·9	27·1	+0·7	26·9	84	
Amravati ...	1213	959·8	−1·3	956·7	86·3	−1·2	100	4	74·2	+0·2	72	4days	76·3	83·8	73·4	76·0	26·8	+0·4	27·1	87	
Yeotmal ...	1481	950·9	...	948·4	86·1	...	101	4	71·4	...	69	24	75·7	79·8	73·3	75·3	27·6	...	27·9	89	
Khandwa ...	1044	965·1	−1·5	962·0	87·7	−0·2	100	1,2	74·8	−0·5	72	30	78·1	83·1	74·4	75·4	27·4	+0·5	26·5	84	
Hoshangabad ...	992	966·1	−1·7	962·9	87·5	+1·4	101	2,3	75·2	+0·1	71	23	77·1	83·6	74·7	76·5	28·2	−0·1	28·0	90	
Sagar ...	1808	937·9	−1·5	935·8	85·9	0	98	3	74·4	+0·5	71	29	76·4	81·3	73·7	75·2	27·1	+0·4	26·9	89	
Jabalpur ...	1289	955·4	−1·2	952·6	85·5	−0·9	97	3	75·1	+0·	72	18	78·1	82·5	75·1	76·6	28·4	+0·9	28·6	86	
Seoni ...	2027	932·2	−0·9	929·6	82·5	−1·6	91	3	72·4	+0·1	6	17,18	75·5	78·1	73·1	74·4	27·3	+1·1	27·7	90	

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																				STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.										
0830 hrs. I.S.T	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
4	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																															Rajasthan, West
6·6	+0·5	3·9	4·49	+2·29	2·65	13	7	+2·7	6·6	−0·8	1	2	9	7	3	7	2	0	0	0	7	9	5	1	6	3	0	0	Sri Ganganagar
6·0	+0·1	4·5	10·45	+7·11	4·35	23	9	+4·1	5·7	−1·3	0	1	0	7	1	14	1	2	5	2	3	0	8	1	11	0	4	2	Bikaner
4·0	...	4·5	2·98	...	1·22	31	5	...	13·5	...	0	3	0	2	1	24	1	0	0	1	3	1	2	6	16	1	1	0	Jaisalmer
5·6	+0·9	5·7	7·11	+3·14	3·93	11	8	+2·5	7·2	−4·9	0	2	1	0	2	20	4	1	1	1	3	0	3	2	15	5	1	1	Jodhpur
4·3	...	4·5	6·21	+3·50	2·41	16	8	+4·2	10·9	...	0	1	2	0	3	22	2	1	0	0	1	2	2	7	16	1	2	0	Phalodi
5·6	+1·2	6·3	4·20	+0·95	2·32	31	6	+2·0	8·3	+1·1	0	2	2	3	5	15	4	0	0	0	1	3	6	6	10	5	0	0	Barmer
																															Rajasthan, East
5·6	...	6·0	11·97	...	1·72	18	12	...	5·8	...	0	0	3	3	5	12	5	0	3	1	2	3	4	5	3	3	4	6	Sikar
5·7	+0·5	6·9	13·79	+6·05	3·29	18	18	+7·7	5·0	0	2	1	4	6	3	1	4	7	3	1	2	9	6	1	0	7	5	0	Jaipur
5·4	+1·6	6·3	11·33	+4·92	3·41	12	12	+3·1	6·8	+0·8	1	2	3	0	2	12	9	0	2	0	4	2	3	0	6	11	2	3	Ajmer
5·3	+1·0	6·6	12·66	+2·52	2·15	11	17	+5·9	4·8	+0·8	0	2	0	0	0	4	16	1	8	2	3	1	0	1	1	11	1	11	Kotah
5·5	−0·8	5·5	14·93	+3·25	5·63	22	16	+2·5	7·3	+2·4	0	2	0	1	2	7	16	2	1	4	3	2	0	1	1	14	5	1	Jhalawar
7·3	...	7·3	14·14	+5·59	4·17	29	16	+5·6	4·6	...	2	1	0	2	5	8	5	5	3	1	2	1	1	7	9	8	2	0	Udaipur
																															Madhya Bharat
5·1	...	7·0	12·98	...	2·31	25	13	...	3·1	...	0	2	8	4	1	4	6	3	3	0	4	7	1	2	4	7	1	5	Gwalior
5·8	+1·0	7·3	10·28	−4·07	3·87	22	15	−0·5	7·7	+0·8	0	1	0	0	3	9	13	3	2	3	3	1	0	5	9	4	5	1	Guna
7·5	+1·7	7·3	14·12	+4·66	3·51	11	14	+3·4	8·4	−0·4	0	1	1	1	1	10	15	0	2	0	4	1	0	1	10	11	2	2	Neemuch
7·9	...	7·7	26·50	...	11·83	29	20	...	8·2	...	1	0	0	0	1	10	17	2	0	0	0	0	1	1	12	16	1	0	Ratlam
7·5	+0·3	7·4	16·21	+5·09	9·78	29	17	+3·7	13·4	+0·9	0	0	0	0	1	10	19	1	0	0	0	0	0	0	10	18	3	0	Indore
7·3	+0·7	7·5	17·89	−1·84	4·83	29	17	+0·6	7·4	+1·4	0	0	1	0	1	8	13	8	0	0	0	0	0	2	10	14	5	0	Bhopal
7·5	+0·9	7·6	13·56	−6·17	4·00	29	23	+6·6	11·5	+1·5	0	1	0	0	1	7	14	8	0	2	1	1	0	1	6	13	7	0	Bairagarh
6·3	...	7·1	19·72	...	4·62	24	22	...	6·5	...	3	2	7	2	1	6	6	3	1	3	6	5	1	2	4	6	2	2	Madhosagar
																															Vindhya Pradesh
5·8	−0·4	6·4	17·12	−3·31	2·62	10	18	+3·9	3·6	+0·5	0	3	2	0	0	17	4	1	4	2	5	3	0	0	9	3	3	6	Nowgong
5·8	−0·4	6·2	16·17	+1·93	3·52	22	18	+2·6	4·8	−0·3	0	2	3	0	2	15	5	0	4	2	4	2	1	1	10	1	2	8	Sutna
7·6	+0·6	7·4	17·21	−0·54	3·03	28	18	+2·1	4·1	+0·3	0	1	1	4	0	3	12	5	5	0	0	1	2	2	5	7	6	8	Umaria
																															Madhya Pradesh East
7·4	...	5·7	22·51	...	4·08	10	19	...	4·4	...	1	0	1	0	1	9	10	4	5	0	0	0	0	1	11	2	4	13	Gondia
7·2	+1·4	7·5	14·07	−0·64	2·59	15	17	−1·9	4·4	−0·1	5	2	3	1	9	2	5	4	0	2	0	1	0	12	6	3	4	3	Pendra
7·5	...	7·4	15·99	...	1·92	7	24	...	6·2	...	0	0	3	0	1	10	14	2	1	1	2	3	1	1	10	10	2	1	Champa
7·8	+1·4	7·7	10·03	−4·66	1·96	13	19	+3·0	7·8	−0·9	1	0	0	0	3	12	12	2	1	0	0	1	0	1	11	13	2	3	Raipur
7·9	+0·5	7·8	15·47	−0·25	4·03	1	22	+4·1	4·7	−1·3	0	0	0	0	0	16	6	0	9	0	0	0	0	1	8	7	3	12	Kanker
7·6	+1·4	7·1	15·32	−0·99	1·62	14	20	+3·1	5·5	+0·3	0	0	0	0	0	20	1	7	3	2	0	1	2	0	9	4	8	5	Chanda
7·7	+1·1	8·0	14·49	−0·64	2·44	12	21	+1·6	8·1	+3·8	0	1	0	6	2	20	1	0	1	0	0	0	9	1	16	3	1	1	Jagdalpur
																															Madhya Pradesh West
7·5	...	7·2	5·78	...	1·47	7,26	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Buldhana
7·5	+1·2	7·1	7·05	−2·74	1·42	26	15	+2·6	9·1	+2·2	0	0	0	0	1	6	17	7	0	1	0	0	0	0	3	18	9	0	Akola
7·2	+1·0	7·2	11·46	+2·05	3·11	6	15	+2·2	11·1	+3·5	0	0	0	0	0	21	0	10	0	0	1	0	0	0	19	0	11	0	Amravati
7·8	...	7·7	15·55	...	2·83	24	21	...	12·8	...	0	0	0	0	1	19	8	3	0	3	1	0	2	0	11	9	5	0	Yeotmal
7·7	+1·6	7·7	10·14	+0·48	1·59	11	17	+4·9	9·8	+2·4	0	0	0	0	2	13	14	2	0	0	0	0	1	2	12	13	3	0	Khandwa
7·5	+0·6	6·5	25·50	+8·79	7·71	29	22	+6·3	4·5	+0·9	0	0	1	0	3	16	10	1	0	0	0	1	0	2	6	6	1	15	Hoshangabad
7·3	+1·1	6·6	14·07	−1·50	1·92	28	18	+1·5	...	...	0	1	1	1	0	7	19	2	0	0	4	0	0	0	15	8	3	1	Sagar
7·4	+0·7	7·4	21·88	+2·50	7·83	28	19	+0·9	5·3	+1·9	0	0	1	0	3	10	15	0	2	1	1	0	1	2	14	10	1	1	Jabalpur
7·3	+1·0	7·2	26·31	+10·09	5·40	17	26	+7·7	4·8	+0·3	0	0	0	2	2	12	3	3	9	1	1	0	1	2	9	5	1	11	Seoni

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Re hu
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Madhya Pradesh West *(Contd.)*																				
Chhindwara ...	2,248	925·0	...	922·8	81·6	...	90	2,3	71 8	...	68	17	74·7	78·7	72·2	73·9	26·0	...	26·6	88
Betul ...	2,144	929·1	...	926·3	81·8	...	94	2	71·4	...	69	30	73·5	78·0	71·3	73·7	25·3	...	25·3	89
Nagpur ...	1,010	966·1	−1·3	963·3	86·7	−1·6	98	4	74·9	−0·6	73	12,17 18	77·9	83·0	73·1	76·9	28·6	+1·4	29·6	87
Gujarat																				
Deesa* ...	466	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Surat ...	39	1000·4	−0·8	998·0	85·3	−1·9	93	5	77·5	−0·3	74	9	80·2	82·7	78·3	79·0	32·2	+1·2	32·2	92
Ahmedabad ...	163	994·5	−1·5	991·5	87·6	−5·5	101	1	77·1	−1·4	73	11	79·1	85·1	77·2	79·4	31·0	+1·2	31·7	92
Dohad ...	1,093	963·0	...	960·5	84·6	−2·6	96	1	73·5	−1·9	72	8 days	75·9	81·0	74·2	75·9	28·1	−0·9	28·3	92
Baroda ...	115	996·5	...	994·0	87·2	−2·6	99	1,4	76·8	−0·8	75	7 days	79·1	83·3	77·5	78·5	31·5	+0·7	31·1	93
Saurashtra & Kutch																				
Bhuj ...	343	987·3	−1·2	985·4	88·4	−2·4	97	6	78·0	−0·1	75	14,15	80·7	86·0	77·1	77·1	30·2	+0·1	28·1	85
Dwarka ...	37	998·8	−1·0	997·0	85·1	−1·6	89	6	79·9	−0·8	77	12	81·1	83·0	79·0	79·3	32·9	+1·1	32·5	88
Jamnagar ...	60	997·7	−1·0	...	88·7	−1·9	95	5	76·4	−2·1	67	14	81·3	...	77·4	...	30·1	−0·9	...	83
Rajkot ...	432	984·9	−1·5	982·4	88·1	−3·1	99	1	76·7	+0·2	73	14	78·6	84·0	76·3	77·0	29·9	+0·6	28·5	89
Veraval ...	26	1000·1	−1·4	998·4	83·3	...	88	1,5	77·7	...	75	5 days	79·8	81·0	78·4	78·8	32·5	...	32·6	94
Bhavnagar ...	55	998·8	−1·1	996·1	89·0	−3·9	102	1	77·1	−1·3	73	9	79·5	83·9	76·5	77·7	29·8	+0·2	29·6	87
Konkan																				
Dahanu ...	15	1001·4	...	999·9	83·8	...	92	10	77·0	...	74	11	80·7	82·2	74·5	78·5	26·3	...	31·6	87
Bombay ...	35	1002·1	−1·1	1000·4	85·0	−0·5	90	1,2	76·9	+0·2	73	8	80·6	82·0	77·7	78·2	31·2	+0·6	31·2	87
Alibag ...	23	1003·1	−0·9	...	84·1	−0·3	88	1	77·5	−0·1	75	28	81·3	...	79·1	...	33·0	+1·8	...	90
Harnai ...	6	1001·9	...	1000·6	83·4	...	87	6	73·3	...	64	11	80·5	81·2	78·5	75·4	32·4	...	27·4	90
Devgad ...	117	999·6	...	998·7	82·7	...	87	2,10,11	77·5	...	73	3,7	79·1	80·6	76·5	77·6	30·0	...	31·0	87
Vengurla ...	29	1004·8	...	1003·2	82·5	...	87	1,9,10	74·6	...	73	9 days	78·4	79·3	76·2	76·8	29·9	...	30·3	91
Marmagao ...	202	999·1	−0·8	997·4	81·0	−1·6	86	1	74·8	−0·4	73	6 days	78·0	78·9	76·0	76·1	29·7	−0·3	29·5	91
Honavar ...	85	1004·9	...	1003·2	82·2	...	89	1	73·8	...	71	18,19	76·8	78·9	75·7	76·9	29·9	...	30·7	95
Deccan (Desh)																				
Jalgaon ...	660	978·0	...	976·0	88·8	...	103	2	75·5	...	73	26,30	78·1	84·6	75·9	77·5	29·5	...	29·1	90
Malegaon ...	1,432	953·7	−0·9	950·6	85·7	−2·5	98	1	73·8	+0·3	71	5	77·7	81·1	73·2	73·8	25·9	+0·5	25·2	80
Deolali ...	1,874	939·2	...	...	79·9	...	89	1	71·3	...	70	8,27,30	73·7	...	71·4	...	25·3	...	...	89
Ahmednagar ...	2,154	931·0	−1·0	928·5	84·2	−1·1	94	1,3	71·3	+0·6	69	26,30	74·8	80·0	70·5	70·9	23·7	+0·2	22·2	81
Poona ...	1,834	941·4	−1·3	939·6	81·5	−1·0	90	1	71·8	+0·1	70	5 days	74·6	77·0	71·3	71·9	24·8	+1·0	24·7	85
Sholapur ...	1,570	951·2	−0·5	947·7	90·0	+0·8	96	1	73·3	+1·2	71	26,27	77·6	84·1	71·8	72·6	24·2	+0·4	22·7	75
Miraj ...	1,817	943·3	−1·3	941·3	81·8	0	89	4,5	72·2	+1·4	70	12,26,31	74·2	77·2	71·5	71·8	25·3	+0·8	24·4	88
Kolhapur ...	1,885	941·3	...	939·4	78·7	...	86	1,4	70·3	...	68	18	73·4	74·6	70·7	71·1	24·5	...	23·5	88
Bijapur ...	1,950	938·4	−1·4	936·1	86·5	−0·1	92	4	72·1	+1·2	69	31	75·2	82·2	70·9	72·0	24·1	+0·6	22·7	80
Belgaum ...	2,562	920·4	−0·3	918·8	75·3	−0·9	83	1	68·0	+0·6	66	23	69·9	72·0	68·6	69·7	23·3	+0·1	23·8	93
Gadag ...	2,131	934·4	−0·4	932·3	83·0	−0·1	89	5,10	70·2	+0·2	69	4 days	73·8	77·5	70·5	70·8	24·1	+0·4	23·1	84
Hyderabad, North																				
Aurangabad ...	1,905	938·8	−1·2	935·9	84·3	−1·7	95	1,2	70·9	0	67	6	73·5	80·3	71·3	72·9	25·4	+1·0	24·6	90
Parbhani ...	1,350	955·6	...	952·2	89·8	...	100	3	73·5	...	70	27	77·6	84·2	72·9	73·6	25·5	...	23·5	79
Ramagundam ...	527	984·7	...	981·3	97·6	..	104	1	78·0	...	70	13	83·1	84·6	75·1	76·5	26·5	...	27·9	69
Nizamabad ...	1,250	959·8	−1·4	956·5	87·5	−0·7	98	4	73·9	0	70	23	76·6	83·3	72·2	75·1	24·9	−0·4	26·0	80
Bidar ...	2,178	929·9	...	926·6	85·5	−0·7	92	3	70·7	+0·7	69	5 days	73·3	83·1	70·2	71·8	24·0	+0·6	22·0	86

* Data not reliable

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																				STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.										
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Madhya Pradesh West *(Contd.)*
7·7	...	6·4	16·62	...	3·90	17	21	...	6·0	...	2	0	0	0	1	4	17	6	1	1	1	0	0	1	5	11	9	3	Chhindwara
7·7	...	7·8	15·33	...	2·38	28	23	...	6·2	...	0	0	0	0	2	4	17	8	0	0	0	0	0	0	7	15	8	1	Betul
7·7	+1·2	7·6	10·67	−3·93	3·09	12	16	−0·5	6·7	...	0	0	0	0	1	11	15	2	2	1	1	0	0	0	8	17	3	1	Nagpur
																													Gujarat
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Deesa *
7·8	+0·9	7·4	20·74	+3·32	5·22	8	23	+6·7	7·8	+0·5	0	0	0	0	0	17	7	0	7	0	0	0	0	0	31	0	0	0	Surat
7·5	+1·1	7·5	21·23	+9·01	3·14	12	24	+11·4	4·5	−0·4	0	0	0	1	1	18	18	1	4	1	0	0	0	4	11	11	2	2	Ahmedabad
7·7	+0·4	6·9	20·21	+11·19	4·18	29	17	+4·0	17·3	+8·3	0	0	0	0	0	16	14	0	1	1	0	0	0	0	19	11	0	0	Dohad
7·1	+0·1	7·0	34·86	+22·63	6·12	13	25	+12·3	5·0	−0·6	0	0	0	0	3	20	5	0	3	0	0	0	0	5	20	6	0	0	Baroda
																													Saurashtra & Kutch
6·3	+0·3	6·8	26·04	+19·71	13·86	14	7	+1·0	11·3	−0·4	0	0	0	0	0	7	21	3	0	0	0	0	0	1	15	15	0	0	Bhuj
7·2	+0·6	6·4	7·26	+0·31	4·24	14	6	0	17·2	+2·3	1	0	0	0	0	8	22	0	0	0	0	0	0	0	8	23	0	0	Dwarka
7·3	+2·4	...	15·44	+6·51	6·90	14	12	+4·1	11·8	−2·2	0	0	0	0	0	15	15	0	1	...	...	...	...	...	...	...	...	...	Jamnagar
7·0	+0·4	7·3	24·50	+13·83	14·77	14	14	+3·5	16·0	+4·0	0	0	0	1	1	13	14	2	0	0	0	0	0	1	14	14	2	0	Rajkot
7·4	+0·8	7·1	20·04	+12·26	6·88	8	19	+9·8	17·6	...	1	0	0	0	0	7	21	2	0	0	0	0	0	0	9	19	3	0	Veraval
7·3	+1·0	7·3	17·03	+10·02	3·35	9	18	+8·7	8·7	+1·3	0	0	0	0	1	16	13	1	0	0	1	0	0	5	11	13	0	1	Bhavnagar
																													Konkan
7·8	...	7·6	37·89	...	7·10	13	25	...	18·6	...	0	0	1	2	0	14	14	0	0	0	0	0	0	0	13	18	0	0	Dahanu
7·5	+0·5	7·6	23·82	−0·45	5·82	8	25	+2·9	11·3	−0·3	0	0	0	1	0	7	20	3	0	0	0	0	0	1	11	17	2	0	Bombay
7·8	+0·2	...	21·62	−1·82	5·45	8	25	+1·7	21·1	+3·4	0	0	0	0	2	10	17	1	1	...	...	...	...	...	...	...	...	...	Alibag
4·8	..	5·2	27·16	...	5·97	20	29	...	15·8	...	0	0	1	1	0	25	3	1	0	0	0	0	1	2	22	6	0	0	Harnai
7·5	...	7·4	31·69	...	4·39	23	29	...	19·8	...	0	0	1	3	0	5	21	1	0	0	0	0	0	1	5	22	3	0	Devgad
7·8	...	7·5	50·00	...	4·56	5	30	...	...	...	0	0	0	0	0	3	20	0	8	0	0	0	0	0	4	20	0	7	Vengurla
6·7	−0·2	6·3	46·34	+15·05	4·31	2	30	+3·4	14·1	+4·2	0	1	1	1	1	7	16	4	0	1	0	0	0	2	11	14	3	0	Marmagao
7·1	...	7·0	58·96	+14·12	7·07	18	30	+1·7	3·4	...	1	0	2	2	0	5	10	1	10	0	0	1	2	1	6	13	2	7	Honavar
																													Deccan (Desh)
6·8	...	6·3	10·95	+1·44	2·34	7	15	+0·7	8·9	...	0	0	0	0	0	8	20	3	0	0	0	0	0	0	3	14	14	0	Jalgaon
7·0	+1·0	6·5	9·37	+4·95	2·91	27	13	+5·6	6·5	−3·1	0	0	0	0	0	0	31	0	0	0	0	0	0	0	8	22	1	0	Malegaon
7·6	...	...	16·83	...	2·64	12	24	...	11·5	...	0	0	0	0	0	8	22	0	0	...	...	...	...	...	...	...	...	...	Deolali
7·3	+1·5	7·3	5·07	+1·29	2·97	6	6	−0·8	7·9	−1·8	1	0	0	0	0	22	5	2	1	0	1	0	1	0	15	7	7	0	Ahmednagar
7·5	+0·9	7·5	10·94	+4·38	1·82	27	18	+5·3	4·8	−5·4	0	0	0	0	0	1	25	1	4	0	0	0	0	0	1	29	0	1	Poona
7·0	+1·0	8·8	2·43	−1·75	0·82	22	8	+0·3	9·0	−1·1	0	0	0	0	0	30	0	0	1	1	0	0	0	0	25	3	2	0	Sholapur
6·6	−0·8	6·8	6·11	+1·98	1·14	26	13	+3·9	11·4	+0·9	0	0	0	0	0	10	19	2	0	0	0	0	0	0	9	17	5	0	Miraj
6·8	...	7·3	19·46	...	3·09	21	22	...	13·8	...	0	0	0	0	0	5	25	1	0	0	0	0	0	0	2	29	0	0	Kolhapur
6·3	+0·2	7·0	0·53	−1·84	0·13	5	2	−2·3	10·8	+1·4	0	0	0	0	0	10	16	5	0	0	0	0	0	0	8	15	8	0	Bijapur
7·4	0	7·1	31·14	+14·04	3·80	21	26	+3·9	7·5	+1·3	0	1	2	8	10	7	3	0	0	0	0	0	3	7	12	9	0	0	Belgaum
7·4	+1·0	7·4	1·79	−1·10	0·51	12	5	−1·9	13·6	+1·3	0	0	0	0	0	15	16	0	0	0	0	0	0	1	14	14	2	0	Gadag
																													Hyderabad, North
7·9	+0·9	7·3	6·72	−0·02	0·92	24	13	+1·7	12·1	+1·1	0	0	0	0	0	12	15	4	0	2	0	0	0	0	8	15	6	0	Aurangabad
6·9	...	7·3	6·76	−0·56	2·28	5	10	−1·1	...	...	0	0	0	0	0	1	30	0	0	1	0	0	0	0	1	27	2	0	Parbhani
4·8	...	5·1	10·04	...	1·76	25	15	...	5·4	...	3	1	0	10	12	3	1	0	0	1	1	0	6	7	6	4	5	0	Ramagundam
6·8	+1·5	7·2	9·11	−1·04	2·30	23	18	+3·0	6·0	+0·5	0	0	0	0	0	28	1	2	0	1	1	0	0	0	18	0	8	3	Nizamabad
7·6	+2·0	7·3	7·43	−0·68	2·60	23	12	+0·4	15·3	+1·5	0	0	0	0	0	1	13	1	0	1	1	0	0	1	11	13	4	0	Bidar

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M.

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Re hur
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Hyderabad. South																				
Gulbarga ...	1,503	953·0	−1·1	949·2	89·0	−0·4	94	6,7,8	72·6	+0·6	71	8 days	76·3	84·3	71·7	73·1	24·7	+0·5	23·3	80
Raichur ...	1,311	960·3	−0·8	956·6	90·3	0	96	3	73·6	+0·7	71	12,28	76·9	83·7	72·2	73·5	24·8	+0·2	23·5	79
Hyderabad (Begumpet) ...	1,778	943·4	−0·9	940·3	86·5	−0·9	94	3,7	73·1	+0·6	71	11,12, 26	75·2	82·9	71·5	73·9	24·9	−0·2	24·9	83
Hanamkonda ...	881	972·5	−1·2	969·3	88·0	−0·1	93	4,7,18	75·4	−0·3	72	9	79·0	85·2	74·2	76·2	26·7	+0·7	26·8	79
Khammameth ...	367	990·3	...	986·9	89·7	...	96	7	76·2	...	73	4 days	80·5	87·5	76·3	78·3	29·1	...	28·9	82
Coastal Andhradesa																				
Nellore ...	66	1002·2	−0·7	998·5	95·0	−1·9	102	3	79·0	−0·9	74	4	84·1	91·8	75·6	74·2	26·4	+0·1	20·9	67
Ongole ...	38	1002·3	...	998·7	93·9	...	101	2	79·1	...	74	12	83·6	91·7	75·4	76·8	26·3	...	24·7	68
Masulipatam ...	10	1003·0	−0·9	999·5	89·8	−2·6	95	31	77·9	−0·2	75	6 days	81·3	85·8	76·7	79·8	29·3	−0·5	32·1	81
Kakinada ...	26	1001·5	−0·9	998·6	88·2	−2·1	94	1	77·2	−1·2	74	16	81·1	85·7	77·1	78·6	30·0	+0·2	30·1	83
Visakhapatnam ...	136	996·7	−1·1	993·9	87·7	−1·3	95	19	78·1	−0·7	75	4,8,12	81·2	84·9	76·2	77·5	28·6	−0·8	28·9	79
Calingapatam ...	19	999·9	−1·0	997·3	87·7	−2·1	93	1	76·0	−2·9	75	11	81·0	83·4	77·6	79·1	30·8	−0·5	32·0	85
Rentachintala ...	348	991·4	...	987·7	94·2	+1·1	100	19,20	78·4	−0·3	73	12	82·8	90·8	74·8	76·4	25·8	−1·5	24·1	68
Rayalaseema																				
Cuddapah ...	428	990·9	−0·7	986·9	94·6	−1·0	100	31	79·2	+1·1	74	4	83·7	90·9	76·6	78·1	27·7	+1·9	27·1	71
Bellary ...	1,473	955·2	−1·0	952·2	88·0	−2·0	94	1	75·5	+0·5	73	12,21	78·1	84·0	71·1	72·3	22·8	+0·5	21·8	69
Kurnool ...	923	973·4	−0·8	969·5	90·1	−1·5	95	3	74·0	−1·1	71	4,22,26	78·2	86·2	72·9	74·2	25·3	+0·4	23·4	77
Anantapur ...	1,147	966·2	...	962·9	91·1	...	96	1	74·8	...	72	4	78·5	86·2	71·6	72·9	23·3	...	21·6	70
Tamilnad																				
Pamban ...	37	1006·1	−0·4	1003·1	87·9	−1·4	91	20,25	79·7	+0·4	78	31	82·6	83·7	76·5	77·5	28·4	−1·3	29·4	74
Mathurai ...	437	992·0	−0·6	988·9	96·5	+0·6	103	1	78·1	+0·8	73	5,27	84·9	88·8	75·2	76·5	25·4	+2·5	25·6	61
Nagapattinam ...	31	1005·7	−0·4	1002·4	96·3	+0·3	102	1	80·0	+1·1	76	22	84·1	89·0	74·6	77·7	25·0	−1·3	27·3	63
Tiruchi ..	295	996·8	−0·8	993·2	95·8	−1·9	101	1,2	78·7	+0·4	75	4	83·0	90·5	74·0	75·6	24·6	+0·7	23·5	63
Coimbatore ...	1,341	961·8	−0·7	959·6	84·3	−2·4	90	1,2	71·4	+0·4	69	4 days	75·2	78·5	70·5	71·1	23·4	−1·5	22·7	78
Salem ...	913	975·8	−0·8	972·4	91·9	−1·1	99	2	74·5	+0·5	71	31	77·2	86·0	74·7	78·3	28·2	+2·4	29·6	89
Kallakurichi ...	416	991·7	...	988 3	95·0	...	102	1,2	77·0	...	74	16	81·0	90·6	73·0 (a)	74·2 (a)	24·1 (a)	...	21·4 (a)	67 (a)
Cuddalore ...	39	1004·8	−0·6	1001·1	96·3	+0·3	101	14	79·1	+0·5	75	22	84·0	89·1	76·2	78·7	27·6	−0·2	28·9	69
Vellore ...	703	981·8	−0·4	978·2	93·1	−1·0	100	2	78·0	+0·8	74	4,8,31	82·0	89·4	72·5	74·1	23·0	−2·0	21·9	62
Madras ...	51	1003·8	−0·4	1000·2	95·0	−1·3	100	1,2	79·1	−0·2	74	8,31	83·1	88·2	74·4	76·3	25·1	−0·5	25·5	66
Arogyavaram ...	2,299	929·0	...	926·3	85·1	...	92	2	71·5	...	69	3,4,8	74·5	81·7	68·8	70·4	21·8	...	20·8	74
Malabar And South Kanara																				
Mangalore ...	72	1005·6	−0·4	1004·3	82·1	−1·5	87	1	73·0	−1·3	71	13,17	76·5	77·9	75·1	75·8	28·8	−0·6	29·5	94
Kozhikode ...	27	1008·2	−0·4	1006·2	81·1	−1·3	89	3,4	73·0	−1·1	71	20,23	75·2	77·5	74·5	75·9	28·8	0	29·8	97
Palghat ...	319	998·0	...	995·7	80·9	...	86	4 days	72·1	...	69	20	74·3	77·0	73·0	74·3	27·2	...	27·7	94
Mysore																				
Chitaldrug ...	2,405	925·3	−0·9	923·6	80·8	−1·8	88	2	68·9	0	68	9days	71·5	75·7	68·3	69·8	22·2	−0·2	22·2	85
Hassan ...	3,149	902·8	...	901·1	74·5	−3·1	84	2	65·6	0	64	5,18,19	67·7	70·3	66·9	68·3	22·2	+0·7	22·8	96
Bangalore ...	3,021	906·6	−0·6	904·3	79·8	−1·6	87	1,2	66·1	+0·4	64	4,21	68·8	75·0	66·0	67·8	20·0	−1·2	20·3	86
Mysore ...	2,518	923·3	−0·7	921·7	79·1	−3·1	88	2	66·9	−0·3	66	9 days	70·3	74·1	67·9	69·4	22·3	+0·5	22·7	88

(a) Mean of 30 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Hyderabad, South
7·2	+0·8	7·4	3·74	−1·92	1·25	23	8	−1·1	14·5	+3·9	0	0	0	0	0	16	15	0	0	1	1	0	0	0	6	20	3	0	Gulbarga
6·5	+1·7	6·9	3·86	−0·84	0·72	8	15	+6·6	15·0	+5·4	0	0	0	0	0	14	10	7	0	0	0	1	0	0	9	13	8	0	Raichur
7·5	+1·1	7·4	9·31	+3·35	2·84	11	13	+1·9	13·4	+3·3	0	0	0	0	0	1	27	3	0	0	0	0	0	0	3	23	5	0	Hyderabad (Begumpet)
6·7	+0·5	7·1	7·85	−1·19	0·93	9	16	+2·6	8·2	+1·5	0	0	0	0	2	5	21	3	0	3	0	0	0	3	4	11	10	0	Hanamkonda
6·5	...	6·6	14·77	...	2·83	22	19	...	6·7	...	0	0	0	0	1	7	22	1	0	1	0	1	1	0	6	19	3	0	Khammameth
																													Coastal Andhradesa
7·1	+0·8	7·1	5·95	+3·20	3·75	3	5	−0·5	5·3	−0·5	0	0	0	0	0	3	11	3	14	1	0	0	1	0	0	5	2	22	Nellore
6·3	...	6·7	3·43	...	1·38	10	8	...	9·0	...	0	0	0	0	1	16	11	1	2	0	0	1	0	1	9	16	4	0	Ongole
6·6	+0·4	7·0	8·18	+1·79	1·29	22	16	+5·3	8·8	+2·2	0	0	0	0	2	5	19	3	2	0	1	0	0	6	6	14	3	1	Masulipatam
5·4	−0·8	6·0	7·83	+1·28	1·50	4	15	+3·9	8·5	+2·7	0	0	0	0	0	31	0	0	0	0	0	0	0	0	30	0	1	0	Kakinada
6·6	−0·2	6·9	8·38	+3·96	4·23	4	7	−1·5	6·7	+1·2	0	0	0	0	0	8	20	2	1	0	0	0	0	2	18	9	2	0	Visakhapatnam
7·1	+1·7	7·4	3·95	−1·59	1·30	4	12	+3·4	9·3	+1·8	0	0	0	0	0	15	15	1	0	2	2	0	1	7	12	6	1	0	Calingapatam
7·3	+0·3	7·4	2·27	−2·53	0·55	4	6	−3·0	9·3	−0·1	0	0	0	0	0	3	26	1	1	1	0	0	0	0	1	27	1	1	Rentachintala
																													Rayalaseema
7·2	+1·0	7·1	2·56	−1·51	0·90	31	4	−2·7	6·0	−1·4	0	0	0	0	0	0	21	0	10	0	0	0	1	0	0	24	0	6	Cuddapah
7·3	+1·4	7·1	0·82	−0·79	0·27	4	3	−0·4	9·5	+1·0	0	0	0	0	0	0	29	0	2	0	0	0	0	0	0	30	0	1	Bellary
7·3	+1·0	7·1	3·43	−0·99	1·12	22	9	−0·3	13·1	+2·7	0	0	0	0	0	9	19	2	1	1	0	0	0	0	5	15	9	1	Kurnool
6·9	...	6·9	1·69	−0·94	1·22	4	3	−0·9	14·2	...	0	0	0	0	0	9	22	0	0	0	0	0	0	0	4	25	2	0	Anantapur
																													Tamilnad
4·0	+1·0	5·4	0	−0·46	0	...	0	−0·8	10·3	+0·8	0	0	0	1	8	20	2	0	0	0	0	0	9	14	7	1	0	0	Pamban
6·7	+1·2	7·3	1·54	−0·41	1·34	10	1	−1·7	5·5	+0·6	1	0	0	0	0	1	20	6	3	0	0	0	0	1	2	23	2	3	Mathurai
7·0	+2·4	7·2	1·22	−0·48	0·97	30	2	−0·9	7·1 (f)	+1·1	0	0	0	0	1	11	16	1	2	0	0	0	8	8	10	4	1	0	Nagapattinam
7·4	+2·4	7·6	1·03	−0·32	0·69	10	3	+0·9	18·4	−0·3	0	0	0	0	0	0	18	13	0	0	1	0	1	0	2	13	14	0	Tiruchi
6·8	+1·9	7·2	1·78	+0·13	0·41	27	7	+2·3	11·5	+4·9	0	1	0	0	10	15	5	0	0	1	2	0	0	6	14	8	0	0	Coimbatore
6·6	+1·1	7·8	3·11	−0·68	0·83	16	7	−0·1	6·0	+1·8	0	0	0	0	4	21	0	0	0	2	0	0	0	4	8	11	2	4	Salem
7·0	...	7·3	2·83	...	1·54	16	5	...	...	...	0	1	0	3	11	10	2	1	3	0	0	0	1	4	14	3	1	8	Kallakurichi
7·0	+1·9	7·5	2·15	−0·45	0·91	30	3	−2·3	6·7	+2·1	0	0	0	0	0	21	7	1	2	0	0	0	5	5	9	10	1	1	Cuddalore
6·8	+2·0	7·3	1·50	−3·05	0·51	8	4	−2·3	6·7	+1·7	0	0	0	0	0	1	15	8	7	1	0	1	0	1	4	13	9	2	Vellore
7·2	+1·5	7·5	3·48	−0·12	1·07	29	7	+0·2	11·6	+1·8	0	0	0	0	0	12	16	2	1	0	0	0	11	2	8	8	2	0	Madras
7·7	...	7·5	3·27	...	1·28	8	5	...	8·6	...	0	0	0	0	0	2	3	6	0	0	0	0	0	0	3	20	8	0	Arogyavaram
																													Malabar And South Kanara
7·8	+0·8	8·0	56·01	+17·11	6·69	17	31	+3·5	4·8	−0·8	1	2	7	2	1	5	9	1	3	3	2	0	0	3	9	11	2	1	Mangalore
7·7	+0·6	7·9	39·08	+6·62	4·60	23	30	+3·5	5·7	+0·9	5	5	3	0	1	3	7	7	0	3	1	1	0	1	1	11	13	0	Kozhikode
7·5	...	7·8	21·79	...	2·20	23	26	...	7·3	...	0	0	0	0	0	4	27	0	0	1	0	0	0	0	8	22	0	0	Palghat
																													Mysore
7·2	+0·1	7·3	2·96	+0·09	0·52	29	9	+0·8	10·3	+2·1	0	0	0	0	1	15	15	0	0	0	0	0	0	1	13	17	0	0	Chitaldrug
7·7	+0·7	7·8	9·98	+4·18	1·95	28	22	+8·8	10·7	+3·7	0	0	0	0	0	8	22	1	0	0	0	0	0	0	6	23	2	0	Hassan
7·7	+0·6	7·8	2·81	−1·13	0·63	31	8	0	12·1	+3·7	0	0	0	0	0	10	18	3	0	0	0	0	0	0	6	22	3	0	Bangalore
7·4	+0·8	7·6	3·27	+0·59	0·56	30	11	+3·7	8·7	−0·2	0	0	0	0	0	14	16	0	1	0	0	0	0	0	3	27	1	0	Mysore

(f) Mean of 25 days

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Travancore-Cochin																					
Fort Cochin ...	10	1009·3	−0·6	1007·3	81·1	−1·5	87	1	73·4	−1·3	71	20,26,27	75·9	77·5	74·2	74·9	28·1	−0·4	28·4	93	+6
Alleppey ...	13	1009·3	...	1007·1	82·5	...	87	1	72·7	...	69	27	75·9	77·7	74·9	75·5	29·1	...	29·1	95	...
Trivandrum ...	211	1002·3	−0·4	1000·5	83·9	...	88	19	73·0	...	70	8,20,26	76·5	78·9	74·1	74·8	27·7	−0·1	27·6	89	+2
Nagercoil ...	195	1002·1	...	999·8	86·4	...	92	11	74·7	...	71	27	78·5	80·6	74·1	74·4	26·8	...	26·2	80	...
Hill Stations Excluding Kashmir																					
Aijal ...	3,599	884·6	...	883·1	74·3	...	80	23,26	66·6	...	65	4,8	70·9	71·7	69·2	70·2	23·9	...	24·6	92	...
Shillong ...	4,921	844·3	−0·2	842·1	76·3	+1·0	81	26	64·7	+0·1	61	10	70·2	70·8	66·6	66·3	21·0	+0·2	20·2	83	+2
Cherrapunji ...	4,309	863·5	+0·3	861·1	71·0	−1·3	79	12	64·5	−0·8	60	5	67·4	68·5	66·6	67·0	21·7	−0·3	22·0	96	+6
Darjiling ...	7,432	772·3	−0·3	770·2	66·3	+0·6	71	12.26.27	57·5	−0·5	55	5	61·9	61·4	61·3	60·8	18·4	+0·4	18·1	97	+4
Kalimpong ...	3,965	873·6	+0·6	871·4	75·2	−0·1	80	29	68·2	+1·0	65	2,3,6	70·2	72·8	69·3	71·1	24·0	0	25·5	95	+4
Katmandu ...	4,388	860·4	...	858·1	84·4	+0·7	88	9,27	68·0	−0·7	66	1,6	75·3	77·0	70·4	71·8	23·3	−0·3	24·8	78	−2
Muktesar ...	7,592	767·4	−0·7	765·8	68·2	−1·2	74	27,28	57·8	−0·2	57	7 days	60·9	64·2	60·7	62·4	18·1	+1·1	18·1	96	+6
Mussooree ...	6,699	791·5	...	789·8	68·2	−1·0	72	27,28	60·2	−0·4	58	4,8,12	63·7	65·5	62·7	64·5	19·1	0	20·3	92	−1
Simla ...	7,224	776·6	−0·5	775·3	67·7	−3·2	76	1,2	59·9	+0·7	59	10 days	62·6	64·4	61·1	63·1	17·8	+0·7	19·1	93	+13
Abu ...	3,945	870·9	−1·5	868·8	74·0	−1·3	88	6	66·5	+0·4	64	18	68·2	72·3	67·1	69·4	22·3	+0·3	23·3	95	+4
Pachmarhi ...	3,528	884·9	−1·4	882·7	75·5	0	86	2,3	68·1	+0·3	65	29	69·6	73·5	68·6	70·6	23·5	+0·6	24·8	95	+7
Mahabaleshwar ...	4,534	856·9	−1·5	855·6	65·7	+0·3	70	1,5,6	62·6	+0·3	61	7,26	63·6	63·8	63·6	63·8	20·4	+0·1	20·5	100	+3
Mercara ...	3,781	882·4	−1·2	882·0	67·1	−1·6	72	1,2,3	62·3	+0·2	61	5 days	64·3	64·9	64·0	64·7	20·2	+0·2	20·8	99	+4
Kodaikanal ...	7,688	769·2	+0·2	767·7	61·9	−0·4	68	1	52·3	+0·2	50	27	55·5	55·9	52·9	53·8	12·8	+0·2	13·4	85	+8
Ootacamund ...	7,364	777·5	−0·5	776·4	60·2	−1·6	69	2	51·7	−0·4	50	5 days	54·9	55·9	53·9	54·3	13·9	+0·5	13 8	94	+5
Coonoor ...	5,730	823·6	...	...	68·4	−2·4	73	9	59·4	+0·4	55	9	65·3	...	60·3	...	16·1	+1·4	...	76	+7
Tibet																					
Lhasa ...	12,090	617·7	...	...	73·5	...	81	21	48·5	...	43	6,9	57·9	...	56·8	...	15·4	...	...	94	...
Gyantse ...	13,110	625·0	...	...	69·9	+0·2	77	13	44·7	−1·0	38	6	56·3	...	48·5	...	9·0	−0·6	...	42	−22
Ceylon																					
Colombo ...	24	1009·1	−0·2	1006·8	84·5 (a)	−0·9	86	10 days	75·9	−1·1	71	27	79·6	81·3	75·9	76·0	28·9	−0·2	28·7	84	0
Trincomalee ...	24	1006·7	+0·2	1003·8	93·6	+1·4	96	5 days	78·8	+1·2	77	27	82·0	88·5	75·3	77·0	26·9	−0·4	26·4	72	−4
Hambantota ...	61	1006·5	−0·6	1004·0	88·5	+0·9	94	7	76·3	0	73	10,27	79·7	83·3	75·4	75·8	28·1	−0·3	27·0	81	−4
Mannar ...	12	1007·5	...	1004·9	86·3	...	89	6	78·9	...	78	4 days	81·4	82·0	77·4	77·5	30·3	...	30·2	82	...

(a) Mean of 30 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
4	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Travancore-Cochin
·8	+1·2	8·0	32·95	+9·64	3·55	28	25	+0·8	5·3	+0·3	3	6	5	6	1	1	2	5	2	2	2	1	0	1	2	8	13	2	Fort Cochin
·7	...	7·8	33·72	...	3·45	27	29	...	5·8 (b)	...	2	4	7	4	0	3	5	4	2	6	4	4	1	0	0	4	11	1	Alleppey
·9	+0·1	7·2	7·90	+0·13	2·56	26	20	+5·7	6·3	−0·1	9	2	0	0	0	0	1	18	1	2	1	0	0	0	0	2	26	0	Trivandrum
·0	...	7·5	3·55	...	0·87	26	8	...	10·5	...	0	0	0	0	0	0	12	19	0	0	0	0	0	0	0	15	16	0	Nagercoil
																													Hill Stations Excluding Kashmir
·1	...	4·7	14·18	...	1·77	12	22	...	5·0	...	1	2	2	10	6	9	0	1	0	1	1	3	4	2	14	3	3	0	Aijal
·0	+0·3	7·0	10·60	−3·05	2·32	24	15	−3·2	3·0	+0·8	0	0	1	3	2	7	0	0	18	0	0	0	2	3	8	1	0	17	Shillong
·9	+0·4	6·8	71·75	−24·59	10·19	1	30	+2·5	7·8	+2·5	0	10	4	6	5	5	1	0	0	0	10	2	5	5	5	1	1	2	Cherrapunji
·5	+0·4	6·6	36·10	+3·18	5·02	2	26	+0·4	4·7	+1·2	0	0	15	12	0	0	4	0	0	0	0	10	14	0	2	3	0	2	Darjiling
·5	−0·1	5·9	30·03	+7·27	3·66	2	21	−0·9	4·5	−0·9	0	0	1	7	0	0	0	7	16	0	0	1	24	0	0	0	2	4	Kalimpong
·8	+0·2	7·1	20·22	+5·53	2·69	25	23	+0·3	1·0	+0·1	1	1	4	7	1	0	0	0	17	2	2	2	3	2	1	0	1	18	Katmandu
·3	+0·7	6·7	15·03	+2·66	2·62	18	23	+5·2	3·9	−1·3	0	3	6	2	2	4	5	1	8	0	1	5	3	1	6	7	3	5	Muktesar
·5	+0·5	7·0	30·88	+3·42	4·85	10	26	+2·8	2·8	−1·4	3	4	0	2	5	3	1	1	12	1	1	0	5	6	1	0	1	16	Mussooree
·3	+1·0	7·3	26·98	+10·68	3·50	4	25	+5·3	0·8	−1·7	3	1	0	3	3	1	0	0	20	1	1	0	2	6	3	1	1	16	Simla
·7	+0·6	7·0	34·24	+12·25	5·38	30	23	+5·2	7·5 (i)	−0·5	1	0	0	1	2	10	7	1	9	0	0	1	4	10	7	2	1	6	Abu
·8	+0·6	7·6	40·34	+14·11	5·38	28	26	+4·0	4·8	−2·4	0	0	0	0	0	0	25	4	2	0	0	0	0	1	2	27	1	0	Pachmarhi
·0	0	8·0	128·66	+23·33	12·76	20	30	−0·1	12·9	+0·1	0	1	0	0	0	30	0	0	0	0	0	0	0	0	31	0	0	0	Mahabaleshwar
·6	0	7·2	55·17	+12·06	5·67	28	31	+2·5	10·5	+3·3	0	0	0	0	6	6	9	10	0	0	0	0	0	6	6	10	9	0	Mercara
·5	+1·7	8·0	5·11	+0·46	1·58	10	13	+2·8	13·2	+2·7	0	0	0	0	0	0	14	14	3	1	0	0	0	0	0	14	15	1	Kodaikanal
·0	−0·1	7·5	8·26	−0·10	1·29	27	20	+4·2	7·9	+1·9	0	0	0	0	0	2	25	3	1	0	0	0	0	0	1	24	4	2	Ootacamund
·1	+0·7	...	3·27	+0·66	0·76	31	9	+2·0	4·8	−0·1	8	0	0	6	1	5	4	7	0	...	...	...	...	...	...	...	...	...	Coonoor
																													Tibet
·2	...	...	4·72	...	1·02	6	.12	...	0·1	...	0	0	0	0	0	0	0	0	31	...	...	...	...	...	...	...	...	...	Lhasa
·4	−1·8	...	5·53	+2·63	0·98	25	16	+7·8	1·9	−0·8	0	1	0	6	1	0	0	1	22	...	...	...	...	...	...	...	...	...	Gyantse
																													Ceylon
·9	+0·7	6·9	7·15	+2·16	2·42	27	11	+2·6	...	...	0	0	0	1	1	13	13	3	0	0	0	0	0	1	18	11	1	0	Colombo
·9	+2·8	7·2	0·64	−1·15	0·61	31	1	−1·3	..	..	0	0	0	0	0	30	1	0	0	1	1	1	0	0	24	3	1	0	Trincomalee
·8	+2·8	7·2	0·17	−1·96	0·14	20	1	−3·2	...	...	0	0	0	0	0	12	18	1	0	0	0	0	0	0	11	20	0	0	Hambantota
·8	...	7·2	0	...	0	...	0	...	...	...	0	0	0	0	11	20	0	0	0	0	0	0	0	12	19	0	0	0	Mannar

(b) Mean of 29 days

(i) Mean of 22 days

TABLE III.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 4TH CLASS STATIONS— JULY 1950

STATION	Maximum temperature, °F				Minimum temperature, °F				Mean dry bulb temperature 0830 hrs. I.S.T. °F	Mean wet bulb temperature 0830 hrs. I.S.T. °F	Vapour pressure millibars		Relative humidity %		Mean cloud amount, 0830 hrs. I.S.T.	Rainfall, inches				Number of rainy days (0·10″ or more)		Resultant direction 0830
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 0830 hrs. I S.T.	Departure from normal	Mean 0830 hrs. I.S.T.	Departure from normal		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Assam																						
Lumding ...	93·5	+2·3	97	11,17, 28	...	...	...	...	85·0	79·6	31·9	+0·8	77	−5	...	4·78	−2·81	1·26	4	11	−0·5	...
Jammu and Kashmir																						
Jammu ...	93·4	−2·0	108	1	77·5	−1·8	72	17	82·3	77·1	29·5	+1·4	80	+10	6·1	17·62	+4·83	3·48	17	14	+2·5	...
Kargil (R) ...																						
Mysore																						
Balehonnur ...	71·2	−1·9	77	1	65·0	−0·4	63	19,21	68·0	67·0	22·2	+0·2	95	+1	...	58·25	+23·66	7·26	21	28	−0·3	...
Sikkim ...																						
Lachen ...	...	...	...	...	41·0	...	37	4,5	58·9	...	...	...	...	...	...	7·98	...	0·71	26	23	...	...
Tibet																						
Yatung (Chumbi)	67·0	+1·6	71	11, 26	51·4	+0·1	44	10	61·4	56·2	13·1	−1·5	75	−12	4·6	4·09	−2·32	0·61	2	12	−5·7	...

(R) Register not received

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 5TH CLASS STATIONS— JULY 1950

Division	Station	Rainfall, inches				Number of rainy days (0.10″ or more)		Division	Station	Rainfall, inches				Nu rai (0.10
		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal			Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Assam ...	Mawsynram ...	71·62	...	15·22	6	28	...	Jammu & Kashmir	Sonamarg ...	1·65	−1·92	0·31	11	8
West Bengal ...	Bankura ...	15·19	+2·21	2·46	30	25	+9·3		Gurez ...	1·20	−1·04	0·35	30	6
Bihar ...	Muzaffarpur ...	6·14	−6·64	2·00	3	12	−2·0	Deccan (Desh) ...	Khandala ...	101·48 (a)	+33·06	13·00	27	30
	Chapra ...	9·12	−2·95	4·01	18	13	−0·8	Tamilnad ...	Palayamcottai ...	0	−0·33	0	...	0
	Arrah ...	13·04	+0·02	1·46	30	15	−0·5	Sikkim ...	Thangu ...	5·60	...	0·50	31	18
Punjab (I) ...	Dalhousie ...	32·06	+10·14	8·33	14	22	+2·0		Lachung ...	9·21	−1·20	1·00	2,4	23
	Kyelang ...	1·03	−0·27	0·45	10	3	−0·8		Chungthang ...	10·39	...	1·90	2	22
	Gondla ...	0·96	...	0·23	25	4	...							
	Koksar ...	1·04	...	0·24	23,30	5	...							
	Kothi ...	17·83	...	2·70	21	26	...							
	Dharampore ...	19·08	+3·20	3·35	18	25	+7·3							
	Kharsali ...	19·44	...	3·09	20	24	...							
	Rana ...	36·68	...	3·21	20	29	...							
	Jamuna Chetty ...	21·88	...	3·65	31	21	...							

(a) Total for 30 days

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Note :— Data upto 9·0 Km. a.s.l. are given under Table A and data above 9·0 Km. under Table B.

In tables A & B

n represents the number of observations.

V represents the mean wind speed in m/second irrespective of direction.

v represents the resultant mean velocity in m/second.

D represents the direction of the resultant mean wind in degrees East of North.

For the co-ordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Weather Report–January 1950 and subsequent issues.

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JULY 1950

STATION	AHMEDABAD												ALLAHABAD											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	31	3·1	2·9	224	31	2·7	2·5	228	31	2·9	2·3	240	31	1·7	0·7	111	31	2·4	1·3	83	31	2·7	0·8	
0·15 a.g. ...	26	8·1	7·6	237	25	7·0	6·6	239	27	6·2	5·0	257	28	5·6	2·7	113	30	5·1	2·3	93	31	5·9	2·5	
0·6 a.s.l. ...	23	10·9	10·5	254	21	10·4	9·9	262	26	7·0	6·0	255	27	7·0	3·9	121	27	6·4	2·1	112	31	5·4	2·2	
1·0 ,, ...	21	11·2	10·7	259	14	10·4	10·0	273	22	7·9	7·0	256	23	6·0	3·3	126	21	6·5	3·0	114	31	5·6	3·0	
1·5 ,, ...	12	8·6	6·4	261	6	9·7	6·9	272	14	7·9	6·6	254	21	5·9	3·2	116	16	5·5	2·5	112	29	6·2	3·1	
2·0 ,, ...	9	7·6	3·5	232	3	11·0	1·9	297	9	5·6	3·0	256	20	6·0	2·5	95	14	5·9	3·2	89	24	5·9	2·6	
2·5 ,, ...	3	6·3	3·4	68	1	6·5	6·5	120	4	8·6	2·0	81	19	6·2	2·4	75	9	5·9	5·5	105	19	6·4	2·9	1
3·0 ,, ...	2	10·5	10·3	64	1	8·0	8·0	110	2	7·7	3·3	98	17	6·2	3·1	91	7	6·3	6·0	108	16	6·2	3·5	1
4·0 ,, ...					1	7·5	7·5	90	2	8·0	3·3	74	7	4·0	2·7	136	7	6·9	5·0	131	15	5·9	3·6	1
5·0 ,, ...					1	12·0	12·0	100					2	2·7	1·7	112	5	5·1	3·4	135	9	5·3	4·2	1
6·0 ,, ...					1	11·0	11·0	95									5	4·7	4·2	147	9	5·0	3·5	1
7·5 ,, ...					1	8·0	8·0	90									3	6·0	5·2	149	6	5·3	3·2	
9·0 ,, ...																	2	6·0	5·2	146	3	6·8	5·7	1

STATION	AMBALA												ANANTAPUR								ASANSOL			
Time in I.S.T.	0230				0730				1430				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	31	2·8	2·6	113	31	2·5	2·3	105	31	2·7	2·3	125	31	4·4	4·3	252	31	7·5	7·2	267	31	1·8	0·9	1
0·15 a.g. ...	30	6·7	6·5	131	29	6·0	5·6	113	31	5·4	4·5	125	31	7·8	7·7	251	31	10·9	10·6	264	29	4·9	2·7	1
0·6 a.s.l. ...	30	7·6	7·2	138	29	7·7	7·3	129	31	5·8	5·0	128	31	9·6	9·5	254	31	11·8	11·5	265	27	5·9	2·7	1
1·0 ,, ...	30	7·6	6·6	144	25	7·3	6·5	135	30	6·3	5·4	132	31	15·1	14·9	267	31	12·8	12·5	267	19	5·8	3·2	1
1·5 ,, ...	29	6·8	4·9	148	24	6·3	4·3	134	26	6·1	4·7	142	25	17·3	17·0	274	30	13·6	13·5	270	13	5·3	2·7	1
2·0 ,, ...	24	5·7	4·0	138	19	6·0	2·5	124	21	5·4	2·9	132	24	14·7	14·5	277	29	14·2	13·9	274	7	6·1	4·2	1
2·5 ,, ...	23	4·7	2·8	139	17	5·7	1·1	80	18	5·0	1·0	103	21	12·1	11·9	280	24	14·1	13·9	277	3	2·7	2·5	2
3·0 ,, ...	18	4·5	3·2	136	15	5·4	0·7	64	16	5·4	0·6	81	17	10·0	9·7	281	17	11·9	11·6	279	1	1·0	1·0	2
4·0 ,, ...	1	1·0	1·0	345	11	4·0	2·1	85	13	4·7	0·1	150	12	6·9	6·4	282	9	10·1	9·6	288				
5·0 ,, ...					7	4·9	4·4	62	6	3·8	1·3	38	6	8·9	8·7	283	4	9·7	9·3	267				
6·0 ,, ...					7	4·5	2·3	87	5	5·0	0·9	84	3	5·0	3·3	247								
7·5 ,, ...					2	9·5	3·1	211					1	3·0	3·0	235								
9·0 ,, ...					2	8·3	5·7	239																

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JULY 1950

STATION	ASANSOL								BANGALORE												BAREILLY			
Time in I.S.T.	0730				1430				0230				0730				1430				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·1	1·3	125	31	2·4	1·5	119	31	4·3	4·2	255	31	4·6	4·4	253	31	5·7	5·4	260	31	2·2	2·0	91
0·15 a.g. ...	29	4·3	2·4	120	31	4·8	3·1	127	25	9·6	5·6	246	31	8·3	8·1	255	31	10·1	9·9	259	29	5·5	5·0	102
0·6 a.s.l. ...	28	5·2	2·5	129	31	5·3	3·9	125	...	...	...	...	...	...	...	...	...	..	...	...	28	7·3	6·8	121
1·0 ,, ...	18	5·6	3·4	130	28	6·2	4·7	125	28	6·8	6·6	252	31	7·0	6·8	253	31	8·4	8·3	260	25	7·7	5·6	126
1·5 ,, ...	10	4·1	2·9	147	22	6·2	4·7	126	13	17·0	16·7	274	16	13·0	12·8	279	30	10·6	10·4	267	23	7·6	4·3	112
2·0 ,, ...	4	3·1	2·4	137	12	5·6	4·1	126	10	14·5	14·1	280	11	13·8	13·4	285	24	12·7	12·5	276	21	7·8	4·1	116
2·5 ,, ...	3	2·7	2·0	119	6	3·9	3·7	138	8	12·0	11·6	281	7	10·0	9·6	275	14	11·7	11·5	279	20	7·5	4·2	115
3·0 ,, ...	2	4·5	3·1	103	6	4·0	3·1	132	6	9·3	9·1	287	7	9·9	9·6	273	8	10·4	10·0	276	16	7·6	6·0	128
4·0 ,, ...	2	6·0	4·5	127	1	2·0	2·0	110					4	9·5	9·3	267	1	3·0	3·0	305	11	5·1	2·4	115
5·0 ,, ...													2	6·5	5·8	276					7	4·6	2·1	101
6·0 ,, ...													1	8·5	8·5	225					3	4·2	3·4	124
7·5 ,, ...																								
9·0 ,, ...																								

STATION	BAREILLY				BHAGALPUR								BHOPAL											
Time in I.S.T.	1430				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·7	2·0	97	31	2·2	2·0	107	31	2·4	2·3	98	31	3·6	3·3	265	31	3·6	3·1	262	31	3·9	3·2	261
0·15 a.g. ...	31	4·7	3·6	105	30	5·7	5·3	108	31	5·5	5·1	96	20	8·6	8·0	261	21	7·6	6·5	260	26	6·5	5·6	263
0·6 a.s.l. ...	31	5·1	4·7	111	29	7·0	6·3	119	30	7·0	6·8	107	20	8·0	7·4	257	21	6·8	5·9	259	26	5·9	5·0	259
1·0 ,, ...	31	6·0	5·2	121	21	6·0	5·5	121	26	7·5	7·2	115	18	10·5	9·7	264	14	10·2	9·2	271	24	6·2	5·3	267
1·5 ,, ...	29	6·5	4·8	128	14	5·7	5·0	114	19	8·0	7·6	121	11	8·5	7·5	268	12	7·7	6·5	280	19	7·3	5·8	272
2·0 ,, ...	26	7·2	3·8	125	9	5·6	4·9	109	14	7·5	7·1	124	6	5·3	3·6	265	9	5·2	1·3	319	15	7·3	5·2	282
2·5 ,, ...	24	7·0	2·7	126	8	5·2	4·3	119	9	6·5	6·0	126	4	4·0	1·3	181	4	5·0	1·3	175	13	9·4	6·2	289
3·0 ,, ...	23	6·6	1·9	112	8	6·4	4·3	127	5	6·5	6·3	114	3	2·7	1·3	228	4	5·4	1·6	133	8	5·4	2·1	283
4·0 ,, ...	16	5·2	2·9	111	3	3·0	1·4	156	3	7·2	7·6	92					2	4·5	4·5	102	2	5·3	3·8	117
5·0 ,, ...	13	4·2	2·6	96	3	2·3	1·4	201	3	6·1	1·0	98					2	5·5	5·3	116	2	7·0	6·0	103
6·0 ,, ...	11	4·8	2·0	84	3	2·8	2·0	241	3	5·0	4·3	83					2	5·0	3·9	104	2	9·7	8·3	96
7·5 ,, ...	3	5·8	4·1	125	2	3·7	2·9	221	1	7·5	7·5	56					1	6·5	6·5	60	1	7·0	7·0	75
9·0 ,, ...	2	6·5	5·5	65																				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JULY 1950

STATION	BHUJ												BIKANER								BOMBAY			
Time in I.S.T.	0230				0730				1430				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·7	3·6	241	31	3·3	3·1	242	31	4·4	4·2	244	31	2·5	1·5	214	31	2·0	0·7	220	31	7·0	6·7	236
0·15 a. g. ...	27	9·3	9·1	245	29	8·9	8·6	249	28	9·4	9·1	246	30	5·9	4·0	214	31	4·2	1·4	204	29	9·8	9·5	245
0·6 a.s.l. ...	27	13·1	12·9	250	29	14·0	13·6	258	28	11·0	10·6	252	30	8·0	5·4	244	31	4·1	1·6	207	25	11·7	11·5	251
1·0 ,, ...	25	11·4	10·9	248	21	13·1	12·6	259	28	10·7	10·0	256	27	7·2	4·5	264	30	4·4	1·4	204	16	11·6	11·4	257
1·5 ,, ...	16	8·7	7·0	239	17	11·2	9·5	259	15	11·0	9·6	265	26	4·9	1·4	356	28	4·1	0·3	185	8	8·9	8·5	255
2·0 ,, ...	12	5·7	1·5	173	10	6·8	2·6	253	7	8·1	4·2	271	25	5·0	2·9	45	25	4·7	0·7	53	3	6·7	4·9	260
2·5 ,, ...	11	6·1	2·4	113	8	5·3	1·7	86	3	7·7	5·3	89	24	5·3	3·4	47	23	4·8	2·2	38	2	4·5	2·9	287
3·0 ,, ...	8	6·9	4·8	80	7	6·3	5·3	69	3	7·8	6·4	103	22	5·4	4·4	47	22	5·0	3·0	22	2	5·5	2·1	304
4·0 ,, ...	3	8·3	8·0	57	4	8·3	7·7	58	2	14·3	14·2	97	16	5·3	4·2	53	17	5·6	4·5	12				
5·0 ,, ...	1	7·0	7·0	70	4	6·7	6·1	47	1	12·5	12·5	90	11	6·2	4·7	71	12	5·0	3·5	24				
6·0 ,, ...	1	13·0	13·0	55	2	9·5	9·5	42					10	6·7	5·9	79	7	4·6	3·9	45				
7·5 ,, ...					1	2·5	2·5	80					7	7·7	7·4	88	4	3·5	2·5	54				
9·0 ,, ...													1	7·0	7·0	5	1	2·5	2·5	131				

STATION	BOMBAY								CALCUTTA								COCHIN (Willingdon Island)			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	6·5	6·0	236	31	7·1	6·7	238	31	2·5	1·5	171	31	3·2	2·5	147	31	3·7	3·0	162	31	1·6	0·3	603
0·15 a. g. ...	28	9·7	9·2	248	29	10·4	10·0	245	31	6·6	4·4	165	30	5·3	3·6	159	31	6·1	4·9	158	18	2·9	1·8	315
0·6 a.s.l. ...	24	12·0	11·5	257	25	11·8	11·5	253	31	8·9	6·1	192	28	7·3	3·9	169	31	7·1	4·9	161	17	7·7	7·4	293
1·0 ,, ...	14	11·0	10·5	260	13	11·2	11·0	265	29	8·7	6·1	196	26	7·5	4·0	183	28	7·0	4·7	157	16	10·7	10·4	295
1·5 ,, ...	5	7·1	6·0	269	1	1·5	1·5	255	26	7·1	5·5	187	22	6·6	3·5	184	23	6·4	4·7	159	12	11·8	11·7	295
2·0 ,, ...	3	8·7	5·8	273	1	1·0	1·0	355	19	6·3	4·5	202	19	6·4	3·1	184	21	6·2	4·4	157	6	9·0	8·7	294
2·5 ,, ...	2	7·5	5·5	275	1	1·5	1·5	265	11	5·8	4·5	167	10	6·3	4·2	148	17	6·0	4·5	149	3	7·7	7·6	276
3·0 ,, ...	1	5·0	5·0	90	1	1·0	1·0	160	8	5·6	4·4	185	10	6·5	5·1	149	12	6·5	5·2	152	1	6·5	6·5	265
4·0 ,, ...	1	8·5	8·5	80	1	1·5	1·5	65					1	2·5	2·5	85	3	7·3	7·2	163	1	10·0	10·0	260
5·0 ,, ...					1	3·0	3·0	65									2	4·5	1·7	158				
6·0 ,, ...					1	7·0	7·0	75																
7·5 ,, ...					1	13·0	13·0	75																
9·0 ,, ...																								

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JULY 1950

STATION	COCHIN (Willingdon Island)								COOCH BEHAR								CUTTACK							
Time in I.S.T.	0730				1430				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·4	0·3	107	31	2·6	2·0	282	31	1·4	1·1	96	31	2·0	1·5	141	31	1·1	0·7	239	31	1·4	0·9	250
0·15 a.g. ...	24	3·2	0·5	293	25	4·0	3·1	293	24	4·3	3·6	114	31	4·9	4·1	138	30	5·8	4·0	242	29	5·4	3·8	250
0·6 a.s.l. ...	23	9·8	8·8	287	24	10·1	9·7	287	23	6·5	5·7	118	31	5·4	4·7	137	30	9·5	7·6	253	27	9·8	7·0	267
1·0 ,, ...	21	12·5	11·6	287	22	13·9	13·5	290	21	7·1	6·4	115	28	5·1	4·2	128	28	10·0	8·3	264	25	9·5	7·3	272
1·5 ,, ...	10	11·3	11·2	290	14	14·3	14·0	293	15	7·6	7·5	99	20	6·0	5·0	109	26	9·4	7·5	271	22	8·7	6·8	278
2·0 ,, ...	5	13·9	9·8	295	9	13·1	13·0	296	11	8·4	8·2	92	12	6·3	4·5	113	20	8·9	6·8	270	20	7·8	5·7	277
2·5 ,, ...	4	9·0	8·6	293	4	12·3	12·3	303	8	6·7	6·5	95	12	6·0	2·9	118	14	7·2	6·3	265	14	7·8	6·0	273
3·0 ,, ...	2	8·3	8·1	275	2	8·7	8·7	301	8	6·3	6·1	98	9	5·3	3·3	118	11	7·0	5·4	281	10	6·0	3·9	269
4·0 ,, ...	1	6·5	6·5	260	1	4·5	4·5	335	6	4·5	4·4	105	8	6·0	2·8	110	6	3·3	1·9	120	6	3·0	1·7	92
5·0 ,, ...					1	7·5	7·5	310	4	3·3	2·4	106	7	6·4	3·0	118					5	4·9	3·9	118
6·0 ,, ...									2	6·3	5·9	167	4	4·1	3·7	84					2	6·0	6·0	111
7·5 ,, ...									1	3·0	3·0	140	4	6·3	5·6	64								
9·0 ,, ...													2	8·0	6·8	32								

STATION	CUTTACK				DEOLALI				DIBRUGARH								GADAG							
Time in I.S.T.	1430				0730				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·0	0·9	223	25	3·8	3·7	259	31	1·9	0·3	48	31	2·2	1·1	2	31	6·3	6·1	252	31	5·8	5·7	251
0·15 a.g. ...	30	5·8	3·3	238	9	9·2	9·1	244	14	3·5	0·7	106	30	2·8	0·6	340	26	11·7	11·6	254	30	10·5	10·4	254
0·6 a.s.l. ...	30	7·0	4·0	249	9	5·7	5·7	249	13	3·7	1·3	171	30	2·8	1·4	200	...	...	...	...	...	...	...	...
1·0 ,, ...	28	7·7	5·8	278	9	11·1	10·6	247	11	4·2	1·9	178	29	3·8	2·3	224	24	14·7	14·5	265	22	14·1	13·9	265
1·5 ,, ...	23	9·0	6·4	289	6	9·7	9·1	265	9	5·1	2·0	161	28	4·8	3·9	220	15	16·1	15·9	279	14	16·0	15·7	279
2·0 ,, ...	17	7·4	5·3	292	6	9·8	9·1	270	5	3·3	3·0	88	25	5·0	4·2	210	15	14·5	14·3	282	10	13·7	13·4	285
2·5 ,, ...	12	5·7	4·3	298	3	4·5	1·4	296	5	4·2	3·2	78	21	4·0	3·1	207	8	8·7	8·5	293	8	10·3	9·9	886
3·0 ,, ...	10	5·3	3·6	279	3	3·0	0·7	41	4	5·5	4·3	57	20	4·1	2·6	213	8	7·0	6·7	292	5	7·3	7·0	285
4·0 ,, ...	5	4·7	1·1	120	3	4·5	1·9	118	4	3·9	2·0	60	19	4·7	2·0	211	4	8·6	8·3	294	3	4·8	3·1	297
5·0 ,, ...	2	6·0	5·9	131	2	4·3	2·6	80	3	5·8	4·1	110	17	5·3	0·7	202	4	5·5	5·4	270	1	8·0	8·0	285
6·0 ,, ...	1	7·5	7·5	155	1	0·5	0·5	100	3	7·8	4·8	91	15	4·8	1·2	55	2	3·0	2·7	282	1	7·5	7·5	265
7·5 ,, ...	1	3·0	3·0	105	1	6·0	6·0	50	1	7·0	7·0	110	10	6·9	2·2	83					1	1·0	1·0	045
9·0 ,, ..	1	8·5	8·5	95									7	6·9	4·3	20					1	4·5	4·5	200

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JULY 1950

STATION	GADAG				GAYA												GOPALPUR						
Time in I.S.T.	1430				0230				0730				1430				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	7·7	7·6	266	31	2·9	1·6	91	31	2·6	1·7	87	31	3·6	2·0	74	31	3·5	3·2	215	31	5·4	5·1
0·15 a.g. ...	29	12·2	12·1	261	30	5·5	3·0	105	30	4·8	2·8	103	30	5·8	3·5	76	29	7·3	6·3	220	30	7·4	6·7
0·6 a.s.l. ...	...	...	...	...	27	6·3	3·5	134	30	5·9	3·3	123	29	5·5	2·9	85	29	7·6	5·7	256	30	6·2	4·2
1·0 ,, ...	29	14·0	13·9	268	24	6·2	3·5	131	26	6·6	4·1	111	28	5·5	3·4	94	29	9·1	6·7	274	30	6·9	5·1
1·5 ,, ...	24	14·5	14·2	271	22	5·0	3·2	127	23	6·3	4·4	104	22	6·2	4·7	112	28	10·7	8·8	288	27	9·1	6·9
2·0 ,, ...	15	13·3	13·0	278	22	4·9	3·4	107	20	5·5	4·9	96	16	6·3	4·7	115	17	8·5	7·0	287	20	8·2	5·0
2·5 ,, ...	6	12·7	12·5	287	10	3·7	2·4	112	16	5·5	4·9	99	8	7·0	6·0	99	10	7·6	5·6	291	13	7·8	3·1
3·0 ,, ...	1	10·0	10·0	270	6	2·2	1·2	140	12	5·5	4·6	101	5	8·6	7·6	99	6	6·5	3·5	316	12	8·4	3·0
4·0 ,, ...									8	6·3	4·4	119	2	8·3	7·3	134	4	6·1	4·3	250	2	6·7	6·3
5·0 ,, ...									4	3·3	2·3	126					2	4·3	3·0	60	2	6·0	5·9
6·0 ,, ...									4	4·5	3·3	115					2	6·7	6·0	118	2	3·5	3·3
7·5 ,, ...									1	3·5	3·5	119					1	5·0	5·0	340	1	4·5	4·5
9·0 ,, ...																	1	7·0	7·0	275	1	4·0	4·0

STATION	GORAKHPUR								HYDERABAD (Dn.)								JAGDALPUR			
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	2·5	2·3	85	31	2·9	2·3	100	31	6·7	6·3	264	31	6·6	6·2	265	31	8·0	7·5	273	31	2·6	2·3
0·15 a.g. ...	31	6·2	5·8	90	31	5·6	4·9	95	31	11·5	11·3	260	31	10·8	10·4	259	31	10·8	10·4	269	17	7·5	7·1
0·6 a.s.l. ...	23	9·5	9·2	106	30	6·5	6·2	103	31	8·5	8·3	259	31	8·6	8·6	259	31	9·6	9·1	268	17	5·3	5·1
1·0 ,, ...	17	9·6	9·3	110	27	7·7	7·3	109	30	16·1	15·8	270	30	14·4	13·9	274	31	11·0	10·7	268	17	9·8	9·3
1·5 ,, ...	14	9·9	9·6	102	23	8·1	7·6	110	26	16·7	16·2	279	25	15·7	15·4	236	28	12·8	12·5	274	7	10·8	9·3
2·0 ,, ...	12	8·7	8·4	93	18	8·4	8·0	116	23	16·5	16·0	282	16	13·5	13·1	289	27	13·3	12·7	283	5	11·2	9·9
2·5 ,, ...	11	9·0	7·7	85	17	7·3	6·9	115	11	11·3	10·5	283	12	11·5	10·7	289	13	14·4	14·1	279	4	13·5	12·1
3·0 ,, ...	2	3·5	3·0	203	17	6·9	6·7	115	4	9·6	7·7	290	11	10·1	9·1	287	5	13·6	12·5	290	3	11·2	10·9
4·0 ,, ...	2	3·5	3·0	203	13	5·9	4·8	116	2	2·0	1·0	358	7	9·2	8·4	288	1	12·5	12·5	265	2	7·5	7·2
5·0 ,, ...	1	2·0	2·0	192	8	5·7	4·2	130	1	4·0	4·0	110	3	6·0	4·7	259							
6·0 ,, ...	1	2·0	2·0	180	7	6·1	2·8	148					3	5·5	2·8	268							
7·5 ,, ...					1	3·0	3·0	295					2	6·5	5·8	118							
9·0 ,, ...													2	12·3	12·3	100							

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JULY 1950

STATION	JAGDALPUR								JAMSHEDPUR								JHARSUGUDA							
Time in I.S.T.	0730				1430				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·4	2·1	225	31	4·2	3·7	260	31	2·4	0·4	286	31	3·8	0·5	148	31	1·2	0·8	212	31	1·5	1·1	227
0·15 a. g ...	26	6·7	6·1	229	29	7·2	6·3	259	29	3·7	0·2	199	30	5·3	1·2	160	24	5·6	3·9	224	25	4·6	3·1	237
0·6 a.s.l. ...	26	4·8	4·4	231	29	6·1	5·4	260	27	5·3	0·7	231	30	6·0	1·4	171	19	8·0	4·9	251	21	6·7	4·6	261
1·0 ,, ...	24	9·9	9·2	261	28	8·0	7·5	268	19	5·9	0·2	259	27	6·4	2·0	184	16	9·9	5·7	263	12	9·0	6·2	273
1·5 ,, ...	12	13·1	12·5	275	16	9·4	8·5	278	9	5·1	0·5	285	20	5·0	1·6	174	11	8·1	5·5	264	8	7·1	2·8	287
2·0 ,, ...	7	11·9	10·2	285	12	10·6	8·9	285	3	4·3	2·0	23	16	5·2	1·9	147	5	8·5	4·5	306	5	6·5	2·1	256
2·5 ,, ...	4	10·3	9·2	270	10	10·1	7·8	284	1	5·0	5·0	320	15	4·5	2·5	136	3	7·5	5·0	285	2	3·7	2·5	161
3·0 ,, ...	4	8·5	6·7	276	5	9·9	7·8	284	1	3·0	3·0	341	12	5·2	3·0	139	1	8·5	8·5	350	1	3·0	3·0	185
4·0 ,, ...	1	8·5	8·5	325					1	1·0	1·0	61	6	5·3	4·3	131								
5·0 ,, ...	1	5·5	5·5	285					1	3·0	3·0	135	3	6·3	4·5	144								
6·0 ,, ...									1	4·0	4·0	145	3	7·3	4·7	111								
7·5 ,, ...													1	8·5	8·5	90								
9·0 ,, ...																								

STATION	JHARSUGUDA				JODHPUR												JABALPUR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·3	1·7	247	31	3·5	3·1	222	31	3·6	3·1	231	31	3·9	2·4	214	31	2·2	1·6	238	31	2·3	1·9	252
0·15 a. g. ...	30	5·7	4·1	246	31	7·8	7·0	228	29	6·1	4·8	231	31	6·4	4·1	210	28	7·1	6·0	250	25	6·5	5·4	254
0·6 a.s.l. ...	28	6·2	4·2	257	31	8·8	8·0	235	25	7·7	5·7	243	31	6·1	3·4	207	28	7·7	6·4	257	24	7·0	5·7	259
1·0 ,, ...	25	7·6	4·1	272	28	8·7	7·1	233	23	7·7	4·3	243	30	6·6	3·1	212	17	10·9	8·3	269	15	10·6	8·3	274
1·5 ,, ...	21	6·7	2·4	292	25	5·0	1·9	207	22	6·0	1·1	174	26	6·1	1·5	206	15	10·7	8·0	278	7	10·3	7·6	305
2·0 ,, ...	14	8·6	3·5	314	23	4·6	1·9	91	19	6·0	3·0	88	23	5·4	1·1	96	10	8·5	4·8	288	6	7·4	4·0	327
2·5 ,, ...	7	4·9	1·0	147	23	5·7	4·0	64	15	6·9	4·2	92	17	6·9	2·5	84	6	7·2	2·4	283	6	5·8	3·1	359
3·0 ,, ...	4	5·4	3·6	117	17	5·2	4·1	63	12	6·5	5·7	75	12	6·7	3·2	78	3	5·0	3·4	75	4	4·6	3·1	41
4·0 ,, ...	4	6·0	5·3	123	3	7·2	6·6	38	9	7·6	6·4	82	6	5·5	4·9	90					3	3·8	2·4	22
5·0 ,, ...	3	7·0	6·7	121	1	8·0	7·9	61	7	9·8	8·5	79	4	6·7	6·5	68					1	1·5	1·5	195
6·0 ,, ...	2	7·7	7·3	111					5	12·1	11·5	84	4	9·6	9·4	66					1	2·0	2·0	60
7·5 ,, ...	1	7·5	7·5	70					2	8·3	8·3	93												
9·0 ,, ...									1	4·0	4·0	85												

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JULY 1950

STATION	JABALPUR				MADHOSAGAR												MADRAS						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	2·3	1·9	262	31	2·7	0·5	233	31	2·9	0·7	239	31	3·1	0·3	326	31	4·5	4·1	248	31	3·3	3·1
0·15 a.g. ...	29	6·0	5·3	264	31	4·8	1·3	224	28	4·4	0·7	205	30	4·9	0·5	323	29	9·4	8·9	256	31	7·6	7·2
0·6 a.s.l. ...	29	6·1	5·4	263	31	6·3	1·4	215	26	6·1	1·5	252	30	4·8	0·1	304	29	12·8	12·5	269	31	11·8	11·3
1·0 ,, ...	28	6·6	5·5	272	29	6·6	1·4	177	21	6·8	1·6	290	30	4·8	0·6	86	29	13·5	13·2	278	31	13·7	13·2
1·5 ,, ...	23	6·9	4·7	274	26	6·2	1·4	143	20	6·2	0·5	14	27	5·7	1·7	101	29	13·0	12·7	281	31	13·9	13·5
2·0 ,, ...	12	5·0	2·7	319	21	6·1	1·7	122	17	4·9	1·2	37	23	6·4	1·2	131	28	11·8	11·3	281	31	11·8	11·5
2·5 ,, ...	10	5·6	2·3	359	17	5·4	2·2	95	16	4·2	1·5	84	20	5·5	2·5	157	23	10·3	9·5	278	31	11·0	10·7
3·0 ,, ...	7	4·2	1·0	70	15	5·2	3·2	114	15	3·8	1·3	110	18	5·4	2·4	144	21	10·1	9·4	278	30	10·2	10·0
4·0 ,, ...	4	3·3	2·1	132	2	4·7	4·1	112	9	3·8	1·7	131	12	5·1	2·7	145	5	7·8	7·6	263	21	11·4	11·1
5·0 ,, ...	3	4·5	4·2	143	1	1·0	1·0	175	9	5·4	2·1	97	6	4·3	4·2	101					13	10·1	9·2
6·0 ,, ...	3	4·9	4·5	148	1	2·5	2·5	80	9	3·5	1·4	116	5	5·2	4·0	98					8	8·1	7·3
7·5 ,, ...	2	4·5	4·5	94					5	5·0	3·6	136	3	5·2	4·4	102					1	5·0	5·0
9·0 ,, ...	1	5·5	5·5	75					5	6·4	5·4	117	2	4·5	2·1	104							

STATION	MADRAS				MALEGAON												MANGALORE						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	5·2	3·5	242	31	4·4	4·3	267	31	3·4	3·2	263	31	7·0	6·7	269	31	3·2	1·5	255	31	3·0	1·5
0·15 a.g. ...	31	8·3	6·0	249	27	9·5	9·4	262	27	7·5	7·3	261	28	9·7	9·3	266	16	6·5	5·4	254	24	6·1	4·8
0·6 a.s.l. ...	31	8·3	7·5	260	27	9·5	9·4	262	27	7·5	7·3	261	28	9·7	9·3	266	16	10·9	10·5	267	23	10·7	10·3
1·0 ,, ...	31	9·4	8·9	266	27	12·1	11·9	263	26	10·0	9·7	264	27	9·8	9·5	259	13	14·5	14·2	273	19	13·5	13·4
1·5 ,, ...	31	10·9	10·6	272	26	14·8	14·5	264	23	13·2	12·7	264	20	12·1	11·8	263	3	13·5	13·4	285	9	11·5	11·3
2·0 ,, ...	31	12·9	12·6	278	22	13·7	13·4	268	15	13·0	11·9	267	13	11·3	10·9	262					3	10·2	10·1
2·5 ,, ...	26	14·1	13·7	280	10	9·8	9·3	273	13	11·0	9·8	264	9	9·8	8·9	267					3	11·2	11·2
3·0 ,, ...	23	13·4	13·0	281	7	9·1	7·8	277	11	11·5	9·2	262	4	8·1	8·1	273					1	13·0	13·0
4·0 ,, ...	19	13·4	12·9	274	4	7·1	2·7	331	4	7·3	1·8	99	1	6·0	6·0	250							
5·0 ,, ...	9	11·7	10·6	272					2	10·7	10·4	88											
6·0 ,, ...	7	7·5	7·0	267					2	11·5	11·3	85											
7·5 ,, ...	2	5·7	4·1	305																			
9·0 ,, ...	1	7·0	7·0	90																			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JULY 1950

STATION	MANGALORE				MASULIPATAM												NAGERCOIL							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·0	2·5	265	31	3·6	3·2	242	31	2·8	2·7	252	31	3·6	3·1	271	21	5·9	5·5	290	31	4·6	4·2	291
0·15 a.g. ...	23	6·3	5·1	266	23	11·2	10·1	246	30	8·7	8·6	252	31	8·4	7·3	270	30	11·5	11·4	298	31	9·8	9·7	295
0·6 a.s.l. ...	21	10·1	9·5	275	23	16·3	15·0	264	30	16·2	16·0	274	31	10·3	9·8	276	30	17·9	17·7	297	31	18·5	18·2	295
1·0 ,, ...	18	13·5	13·1	279	23	18·0	17·0	275	30	18·3	18·2	281	31	13·0	12·5	281	30	17·7	17·5	295	31	18·7	18·4	293
1·5 ,, ...	11	12·3	12·0	277	23	18·7	18·2	282	30	17·9	17·6	290	29	15·1	14·6	286	30	19·0	18·8	292	31	17·4	17·1	292
2·0 ,, ...	8	14·7	14·2	274	23	16·7	16·1	285	29	16·9	16·3	289	25	16·1	15·5	285	29	16·9	16·5	285	31	18·1	17·8	289
2·5 ,, ...	6	14·0	13·5	273	18	15·5	15·1	281	27	16·0	15·1	289	22	16·3	15·7	283	19	12·2	11·8	280	30	17·2	16·7	286
3·0 ,, ...	1	19·0	19·0	265	16	13·7	13·4	279	25	14·9	12·5	288	20	17·5	16·7	283	15	9·9	9·4	283	28	13·0	12·1	283
4·0 ,, ...	1	18·5	18·5	265	2	10·3	10·3	270	16	13·7	12·2	273	14	14·0	13·5	280	2	3·5	3·5	279	15	9·1	8·4	272
5·0 ,, ...									6	11·7	10·5	254	6	11·0	10·3	267					11	8·1	6·6	270
6·0 ,, ...									2	5·3	5·3	263	5	6·2	5·7	278					7	7·3	4·8	285
7·5 ,, ...									1	10·0	10·0	85	3	9·7	6·5	287					3	4·3	3·4	134
9·0 ,, ...									1	14·0	14·0	80	1	10·0	10·0	35					2	9·7	9·7	85

STATION	NAGERCOIL				NAGPUR												NEW DELHI							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	7·1	6·7	284	31	3·3	2·7	249	31	3·2	2·7	257	31	3·9	2·9	262	31	1·9	0·9	117	31	2·5	1·2	119
0·15 a.g. ...	31	13·5	13·2	287	30	7·0	6·1	254	26	6·0	5·5	257	29	6·2	5·1	261	30	6·3	4·0	125	24	4·9	2·4	127
0·6 a.s.l. ...	31	15·6	15·3	295	20	8·5	7·3	261	26	8·4	7·9	273	29	7·0	6·1	266	30	7·1	4·5	144	24	7·1	3·2	142
1·0 ,, ...	31	18·8	18·6	295	20	10·3	8·3	278	22	11·2	10·7	287	29	8·3	7·1	273	39	7·2	4·2	145	23	7·1	2·8	142
1·5 ,, ...	30	20·1	19·9	296	18	9·1	7·5	285	15	10·5	9·2	297	22	9·9	8·5	290	28	5·7	3·5	139	20	6·3	3·2	126
2·0 ,, ...	27	18·3	18·0	292	11	7·6	6·0	278	11	8·3	6·9	282	15	8·9	7·3	290	21	5·5	3·5	127	20	5·9	3·2	115
2·5 ,, ...	23	15·0	14·7	286	6	6·7	3·8	286	8	7·4	5·6	285	10	9·1	7·9	277	15	5·6	3·5	114	17	5·4	2·4	107
3·0 ,, ...	22	13·5	13·0	280	4	7·6	7·6	269	5	5·4	4·2	283	4	6·6	5·9	305	14	6·3	3·3	121	16	5·3	3·1	107
4·0 ,, ...	15	10·1	9·2	276					2	4·3	2·9	299	1	4·0	4·0	260	1	2·0	2·0	120	9	4·6	3·3	105
5·0 ,, ...	10	11·1	9·8	277					1	2·5	2·5	189	1	2·5	2·5	270					6	5·0	4·3	95
6·0 ,, ...	6	10·2	9·6	274					1	4·0	4·0	340	1	4·0	4·0	150					4	5·3	3·2	97
7·5 ,, ...	6	5·9	2·9	270																	3	5·3	3·9	110
9·0 ,, ...	3	13·3	4·3	230																	2	6·7	6·7	77

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JULY 1950

STATION	NEW DELHI				POONA												PORT BLAIR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·1	1·1	111	31	4·0	3·9	275	31	3·8	3·8	274	31	6·4	6·2	277	31	5·5	5·3	230	31	4·1	3·9	229
0·15 a. g.	29	5·4	2·6	114	26	7·9	7·8	257	29	6·6	6·4	256	30	9·5	9·3	259	27	8·5	8·2	232	30	7·9	7·7	23
0·6 a.s.l.	29	5·4	3·0	116	26	5·7	5·6	258	29	4·7	4·6	256	30	7·5	7·3	263	25	11·8	11·2	235	30	11·8	11·5	23
1·0 ,,	28	5·4	2·7	116	26	10·5	10·4	257	29	10·7	10·5	260	30	11·7	11·5	260	22	10·5	9·9	238	25	10·5	10·1	23
1·5 ,,	23	5·3	2·8	117	13	13·8	13·6	261	15	13·0	12·4	262	19	15·5	15·3	262	19	9·8	9·4	243	18	10·3	9·8	24
2·0 ,,	20	5·7	2·0	128	7	12·0	11·4	269	8	12·4	12·0	273	11	14·9	14·2	264	14	9·7	9·3	242	16	8·8	8·4	24
2·5 ,,	19	5·7	1·1	148	3	6·0	5·8	295	5	6·1	5·3	296	6	12·1	10·2	268	12	8·1	7·5	253	14	8·1	7·4	25
3·0 ,,	17	4·7	1·9	153	2	2·7	2·7	335	4	2·6	1·7	306	4	10·5	10·1	262	9	8·1	7·6	262	12	6·0	5·4	25
4·0 ,,	11	4·6	2·7	118	1	7·0	7·0	95	2	7·0	2·7	63	1	2·0	2·0	45	3	6·3	5·6	247	7	7·1	6·1	26
5·0 ,,	9	4·1	3·1	89									1	4·0	4·0	60					1	5·5	5·5	26
6·0 ,,	7	5·9	5·4	90																	1	3·5	3·5	22
7·5 ,,	3	5·8	4·2	85																				
9·0 ,,	2	5·0	3·3	81																				

STATION	PORT BLAIR				RAIPUR												TEZPUR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	6·1	6·0	226	31	3·3	2·8	231	31	2·7	2·3	230	31	3·5	2·8	252	31	1·0	0·2	278	31	0·8	0·3	1
0·15 a. g.	30	9·4	9·1	234	17	10·6	8·8	247	23	8·3	7·7	242	28	8·0	6·9	257	23	3·7	1·1	186	28	3·3	1·3	1
0·6 a.s.l.	30	12·3	11·9	236	17	11·6	9·9	255	23	11·2	10·3	259	28	8·6	7·7	261	21	4·4	2·9	240	27	4·7	1·5	1
1·0 ,,	20	12·2	11·8	243	16	10·9	9·2	278	19	12·3	11·3	275	27	9·3	8·1	269	17	4·6	2·6	240	22	5·3	1·6	2
1·5 ,,	12	11·5	11·1	246	12	11·8	9·4	288	15	10·3	9·3	287	21	9·3	7·5	283	14	5·3	3·0	222	16	6·5	1·5	1
2·0 ,,	12	9·7	9·2	242	8	10·7	6·7	299	10	9·7	8·7	291	13	10·7	8·4	289	14	5·4	3·0	225	13	5·5	2·0	1
2·5 ,,	8	8·3	7·5	242	4	6·3	1·8	332	9	7·8	6·1	299	10	9·1	5·4	308	9	5·5	3·1	242	9	5·2	1·4	1
3·0 ,,	7	7·5	6·4	246	2	6·7	4·7	141	7	8·4	5·5	317	6	9·1	4·2	333	8	8·2	1·4	228	6	4·0	3·8	1
4·0 ,,	5	6·6	5·5	253	1	3·0	3·0	120	3	8·3	5·5	287	2	8·3	4·5	81	3	9·8	6·8	243	5	3·8	3·0	1
5·0 ,,	1	14·0	14·0	160	1	5·0	5·0	95	1	2·0	2·0	5	1	13·5	13·5	115					3	4·8	4·5	1
6·0 ,,									1	3·0	3·0	35	1	13·5	13·5	120					3	4·3	3·4	1
7·5 ,,									1	2·5	2·5	25									3	3·7	3·2	1
9·0 ,,									1	7·5	7·5	105												

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JULY 1950

STATION	TEZPUR				TIRUCHIRAPALLI												TRIVANDRUM				UDAIPUR			
Time in I.S.T.	1430				0230				0730				1430				0730				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·1	0·1	132	31	5·1	5·0	274	31	4·2	4·0	276	31	6·9	6·7	278	31	1·4	1·3	341	31	2·0	1·5	220
0·15 a.g. ...	30	2·6	0·1	51	31	14·5	10·4	271	31	8·0	7·9	274	31	10·5	10·2	276	30	6·5	6·2	332	28	4·3	4·0	246
0·6 a.s.l. ...	30	3·5	0·6	197	31	16·5	16·4	272	31	14·9	14·7	273	31	11·7	11·7	272	29	11·5	11·1	300	...	...	...	...
1·0 ,, ...	30	4·4	2·3	208	31	16·3	16·1	276	31	16·2	15·9	273	31	12·1	11·9	268	26	13·7	13·3	294	28	5·6	5·0	250
1·5 ,, ...	30	5·5	3·2	218	31	14·1	13·7	276	31	14·0	13·6	272	31	13·6	13·3	266	23	15·2	15·0	296	14	6·0	4·7	266
2·0 ,, ...	29	6·0	3·4	222	25	12·3	11·9	275	31	11·9	11·4	273	31	14·4	14·1	268	20	14·5	14·3	293	10	3·1	1·6	9
2·5 ,, ...	26	5·2	2·9	211	13	8·6	7·5	281	27	10·7	10·3	276	27	13·1	12·8	269	14	13·0	12·5	288	8	6·7	5·4	70
3·0 ,, ...	24	4·9	2·1	199	11	6·9	6·8	277	24	8·6	8·4	281	25	11·9	11·5	271	12	11·7	10·3	279	6	6·8	5·6	80
4·0 ,, ...	21	5·5	1·5	181					12	7·5	7·3	267	17	10·2	9·9	281	6	5·2	4·8	280	2	3·7	3·5	109
5·0 ,, ...	17	5·2	2·1	131					3	6·7	6·0	259	8	9·7	9·6	275	2	4·0	3·9	279	2	6·0	6·0	116
6·0 ,, ...	17	5·1	1·0	157					3	6·7	6·4	255	2	4·5	4·5	300	1	1·5	1·5	247	1	5·0	5·0	125
7·5 ,, ...	13	4·4	0·9	257									2	4·5	2·6	54	1	4·0	4·0	109				
9·0 ,, ...	10	5·2	3·6	14									1	11·0	11·0	90								

STATION	UDAIPUR								VENGURLA												VERAVAL			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·8	1·1	250	31	2·3	1·6	240	31	3·5	3·4	262	31	3·1	2·9	265	31	3·5	3·3	251	31	8·7	8·3	251
0·15 a.g. ...	31	4·3	3·1	255	30	4·8	3·0	243	12	8·6	8·4	255	18	8·8	8·5	259	17	7·7	7·4	252	29	10·2	9·9	253
0·6 a.s.l. ...	...	...	...	...	...	...	...	...	9	12·3	12·1	260	18	13·0	12·7	263	17	11·0	10·8	263	25	13·1	12·8	260
1·0 ,, ...	31	6·0	3·7	267	30	4·9	2·8	251	6	15·1	14·9	262	6	15·4	15·0	263	10	15·4	15·0	270	17	13·6	13·4	258
1·5 ,, ...	19	6·4	2·8	278	28	5·4	2·7	269	3	15·2	15·0	269	2	12·7	12·7	272	3	19·7	19·5	265	6	8·9	6·7	256
2·0 ,, ...	14	7·0	0·6	70	19	6·1	2·6	297	1	11·0	11·0	280					2	17·3	16·9	268	4	9·0	1·9	248
2·5 ,, ...	8	6·4	5·0	75	12	6·0	1·8	349	1	10·5	10·5	300									2	3·5	1·7	97
3·0 ,, ...	8	6·7	5·4	72	7	5·1	1·4	52	1	8·0	8·0	305									2	4·7	2·2	88
4·0 ,, ...	5	5·6	5·3	70	1	1·5	1·5	356																
5·0 ,, ...	4	6·2	5·9	82	1	1·5	1·5	273																
6·0 ,, ...	3	5·6	5·5	123	1	1·5	1·5	177																
7·5 ,, ...	3	6·7	6·5	119																				
9·0 ,, ...	1	8·0	8·0	85																				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

JULY 1950

STATION	VERAVAL								VISAKHAPATNAM												MINICOY			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	6·7	6·3	259	31	7·0	6·6	258	31	3·9	3·6	226	31	3·6	3·5	228	31	6·3	5·8	220	31	6·0	5·7	26
0·15 a. g. ...	28	9·6	9·2	253	28	10·0	9·8	251	27	7·2	6·8	243	30	6·6	6·4	235	30	8·7	8·3	228	25	9·8	9·4	26
0·6 a.s.l. ...	27	13·0	12·8	260	27	12·2	12·0	259	26	9·7	9·0	261	30	10·2	9·6	258	30	8·0	7·6	261	24	13·4	12·9	27
1·0 ,, ...	23	13·0	12·8	263	22	11·8	11·5	261	26	10·8	9·7	269	30	11·6	10·8	273	29	8·7	8·3	280	22	15·9	15·5	27
1·5 ,, ...	11	11·1	11·0	260	12	10·1	9·7	263	20	13·6	12·1	273	26	14·7	13·4	280	25	12·0	11·0	293	20	16·7	16·3	28
2·0 ,, ...	4	9·3	9·1	261	5	6·5	6·4	268	15	11·2	9·9	280	22	12·6	11·4	282	22	14·5	13·0	283	18	15·7	15·3	28
2·5 ,, ...	2	8·5	8·3	271	5	7·5	6·4	265	10	9·5	8·8	276	15	10·8	10·4	277	15	14·0	12·8	276	11	15·0	14·6	28
3·0 ,, ...	1	9·5	9·5	270	3	5·0	0·5	005	4	8·1	7·2	268	11	8·6	8·0	277	12	12·6	10·7	282	7	10·6	9·9	28
4·0 ,, ...					2	3·5	2·6	113	1	7·5	7·5	135	3	9·0	6·3	248	2	7·0	6·9	280	2	8·5	5·5	17
5·0 ,, ...					1	6·0	6·0	080					2	8·5	3·9	194	2	4·5	4·1	262				
6·0 ,, ...					1	8·5	8·5	090					2	7·3	6·1	93	2	2·5	2·5	249				
7·5 ,, ...													1	12·5	12·5	100	1	4·0	4·0	60				
9·0 ,, ...																	1	6·0	6·0	115				

STATION	MINICOY							
Time in I.S.T.	0730				1430			
Height in Km.	n	V	v	D	n	V	v	D
Surface ...	31	5·2	5·0	265	31	5·5	5·3	269
0·15 a. g. ...	30	9·0	8·8	263	28	9·1	8·9	264
0·6 a.s.l. ...	30	12·9	12·5	266	28	12·5	12·1	269
1·0 ,, ...	29	15·9	15·6	272	27	15·7	15·2	276
1·5 ,, ...	27	17·6	17·3	280	20	16·6	16·3	287
2·0 ,, ...	19	15·5	15·2	283	18	14·8	14·5	284
2·5 ,, ...	13	13·8	13·6	282	12	11·6	11·3	277
3·0 ,, ...	8	10·5	10·1	271	10	9·0	8·7	280
4·0 ,, ...	2	8·7	6·3	244	5	8·1	7·6	251
5·0 ,, ...	1	12·0	12·0	270	1	1·5	1·5	95
6·0 ,, ...	1	4·0	4·0	220				
7·5 ,, ...								
9·0 ,, ...								

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

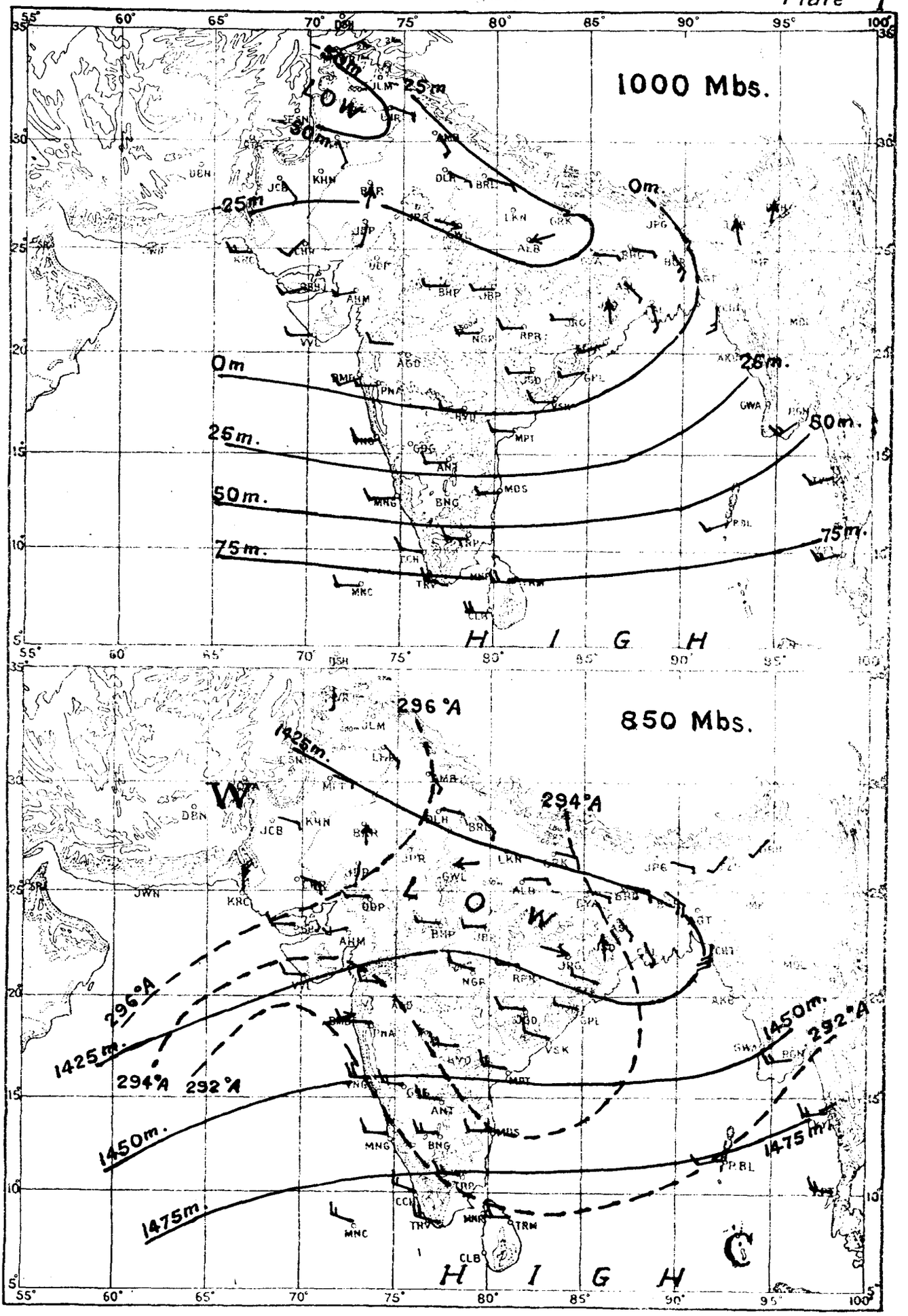
JULY 1950

Height in Km.	n	V	v	D
		ALLAHABAD		
10	2	4·7	4·7	111
11	2	4·0	4·0	111
12	2	7·3	7·1	63
13	2	10·0	9·9	42
14	2	12·7	12·5	47
15	1	11·5	11·5	35
		AMBALA		
10	1	8·0	8·0	175
		BAREILLY		
10	1	8·0	8·0	77
11	1	10·0	10·0	85
12	1	15·0	15·0	95
13	1	13·0	13·0	85
14	1	13·0	13·0	90
15	1	11·5	11·5	95
		BIKANER		
10	1	4·5	4·5	189
11	1	4·5	4·5	189
12	1	5·0	5·0	205
13	1	4·5	4·5	230
14	1	6·0	6·0	205
15	1	6·5	6·5	210
16	1	7·0	7·0	195
17	1	5·5	5·5	200
18	1	6·5	6·5	225
19	1	5·5	5·5	230
20	1	2·0	2·0	121
21	1	5·5	5·5	130
22	1	6·0	6·0	130
23	1	7·0	7·0	115
24	1	9·5	9·5	120
25	1	12·5	12·5	120
26	1	12·0	12·0	124
27	1	15·5	15·5	125
28	1	12·0	12·0	130
29	1	13·5	13·5	130
		COOCH BEHAR		
10	1	6·0	6·0	16
		CUTTACK		
10	1	11·5	11·5	100
11	1	14·0	14·0	95
12	1	16·0	16·0	100
13	1	17·0	17·0	90
		DIBRUGARH		
10	6	8·9	4·5	43
11	5	10·2	5·7	45
12	5	10·1	7·7	49
13	3	6·7	5·7	9
14	3	11·8	9·8	351
15	3	11·0	8·8	355
16	2	13·5	13·3	41
17	1	12·5	12·5	20
		GADAG		
10	1	13·0	13·0	110
		GOPALPUR		
10	1	2·0	2·0	330
		HYDERABAD (Dn.)		
10	2	18·5	18·5	82
11	1	17·0	17·0	80
12	1	15·5	15·5	80
13	1	22·0	22·0	90
		JABALPUR		
10	1	6·0	6·0	90
11	1	10·5	10·5	90
12	1	15·0	15·0	75
13	1	15·5	15·5	90
		MADHOSAGAR		
10	7	6·7	5·7	115
11	3	4·1	2·5	123
12	1	5·0	5·0	35
		MADRAS		
10	1	20·5	20·5	110
		MASULIPATAM		
10	1	19·0	19·0	95
		NAGERCOIL		
10	4	12·9	1·1	19
11	1	20·0	20·0	30
		NEW DELHI		
10	2	7·3	3·9	072
11	2	8·7	4·5	101
12	1	13·0	13·0	75
		RAIPUR		
10	1	8·5	8·5	100
		TEZPUR		
10	8	6·7	4·1	38
11	8	7·7	5·8	47
12	6	8·3	7·5	38
13	5	9·0	8·8	50
14	4	9·7	9·5	49
15	3	7·3	6·9	44
16	2	12·3	12·1	35
17	2	15·5	15·5	57
18	2	18·0	17·9	65
19	2	16·7	16·7	82
20	1	17·0	17·0	90
		UDAIPUR		
10	1	10·0	10·0	80

Height in Km.	n	V	v	D

JULY 1950

Plate I



RESULTANT WIND —\= 5 Knots; —\= 10 Knots; —\= 50 Knots.

------ Isotherms in degrees absolute.

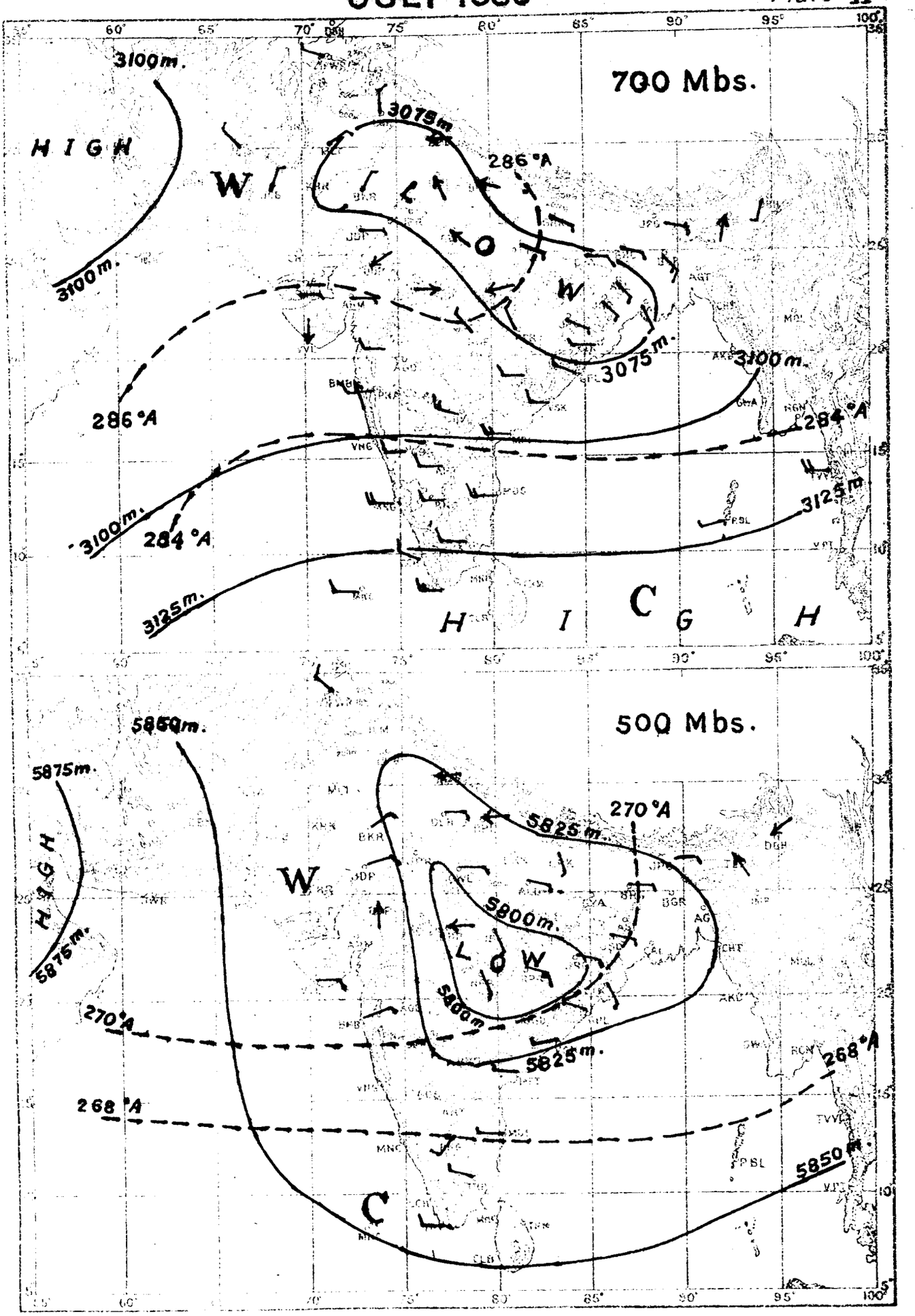
——— Contours in geopotential metres.

G.P.Z. POONA, 53.

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

JULY 1950

Plate II



RESULTANT WIND ——→ = 5 Knots, ——→ = 10 Knots, ——→ = 50 Knots.

– – – – – Isotherms in degrees absolute. ——— Contours in geopotential metres.

G.P.Z. P. POONA, 63.

Registered No. B-3097

INDIA WEATHER REVIEW, 1950

MONTHLY WEATHER REPORT

AUGUST

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CHIEF FEATURES:—(i) Marked activity of the Bay of Bengal branch of the monsoon during the first fortnight causing floods in Uttar Pradesh and Bihar, (ii) a 'break' in the monsoon during the third week and (iii) general strengthening of the monsoon over the whole country towards the end of the month.

The Arabian Sea branch of the monsoon was generally weak over the Peninsula in the first three weeks of August. According to newspaper reports, the drought conditions particularly affected the crops in west Hyderabad and the adjoining districts of the Bombay State. The Bay branch, however, maintained its vigour during the first fortnight chiefly under the influence of two depressions. The first one formed over south Bihar and was centred about 50 miles west of Dumka on the 3rd morning. A low pressure wave moving from the east across Orissa accentuated the depression, which was centred on the morning of the 4th about 70 miles northwest of Balasore. The depression moved westnorthwestwards and lay over Vindhya Pradesh and north Madhya Pradesh on the 6th morning. Weakening thereafter, it finally merged into the seasonal trough of low pressure over the Gangetic plain by the 8th. Under the influence of the depression, there was strengthening of the monsoon over the region extending from Gangetic West Bengal and Orissa to east Rajasthan. Locally heavy falls of rain were reported successively from Orissa, east and north Madhya Pradesh, Madhya Bharat and east Rajasthan during the movement of the depression. The monsoon continued to be active in the central parts of the country, east Rajasthan and Gujarat till the 12th ; thereafter it weakened over these regions.

The second depression which stimulated the Bay monsoon formed at the head of the Bay of Bengal on the 9th morning with its centre near Lat. 21° N., Long. 89° E. It passed inland into Gangetic West Bengal on the same night and slowly moved northwestwards upto east Uttar Pradesh by the 12th. Thereafter, it weakened and moved away northeastwards. In association with this depression, the monsoon was strong in West Bengal on the 12th, in Chota Nagpur and Bihar on the 13th and in east Uttar Pradesh on the 14th. Widespread rain also occurred over northeast India outside Orissa, in Eastern Pakistan, east Uttar Pradesh and in and near the hills of the Punjab (I) during the second week. The heavy rains in the Gangetic plains and very heavy fall in the Himalayan foot hills resulted in severe floods in parts of Uttar Pradesh and Bihar. According to newspaper reports, seven rivers including the Ganges, the Gogra and the Gomati were in spate and inundated about 600 villages in Uttar Pradesh. In Bihar, the Kosi, the Kamala and the Balan and their tributaries also were in high floods and their surging waters devastated a very large area in the Darbhanga district. Railway lines and roads were breached, hundreds of villages were inundated and the paddy and maize crops were seriously affected in that area.

The heavy rains in east Madhya Pradesh and Chota Nagpur in the first week followed by moderate to heavy rain in Orissa and Chota Nagpur during the second week, led to a considerable rise in the level of the principal rivers and their tributaries in Orissa. The rivers overflowed their embankments, submerged the low lying parts and caused appreciable damage to crops and property.

The Bay of Bengal branch of the monsoon rapidly weakened after the 14th and a 'break' in the monsoon set in during the third week and widespread rain was confined to Assam, Eastern Pakistan and sub-Himalayan West Bengal.

In the wake of the great earthquake of the 15th August, some of the rivers in Assam had dried up on account of rock slides. The heavy rain which fell in the extreme northeast of Assam during the third week, washed away these rock

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and brought down a sudden flood in the rivers, causing a serious dislocation of communications and damage to property and crops in upper Assam.

The spell of dry weather in the Peninsula and the central parts of the country was broken in the last week by two low pressure waves from the Bay of Bengal which caused widespread or local rain over those areas during this period. A low pressure area which developed over north Madhya Pradesh and Vindhya Pradesh on the 29th and moved westwards was responsible for a general strengthening of the monsoon over the whole country towards the end of the month.

During the first half of the month, day temperatures were much below normal in northwest India, the Punjab (P) and the North-West Frontier Province on most of the days and in Madhya Bharat, Vindhya Pradesh and Uttar Pradesh on a number of days. On the other hand, Madhya Pradesh, Deccan (Desh), Hyderabad and the adjoining regions had abnormally warm days between the 19th and the 27th of August.

The total rainfall for the month was in large excess in Tamilnad and Mysore, in slight to moderate excess in West Bengal, Chota Nagpur, west Uttar Pradesh, the Punjab (I), Vindhya Pradesh, Rayalaseema and Travancore-Cochin and normal in Assam, Orissa, Bihar, east Uttar Pradesh and south Hyderabad. It was in slight to moderate defect in the Bay Islands, Rajasthan, Madhya Bharat, Madhya Pradesh, Deccan (Desh), north Hyderabad, coastal Andhradesa and Malabar and South Kanara and in large defect elsewhere. Averaged over the plains of India the rainfall was 6% in defect.

Both day and night temperatures were normal except in Hyderabad where the day temperatures were above normal and in west Rajasthan where the day temperatures were below normal.

The relative humidity was normal throughout the country except in west Uttar Pradesh and the Punjab (I) where it was in excess.

The mean cloud amount, was in excess in Tamilnad and normal elsewhere over the country.

Data from Jammu and Kashmir are incomplete.

Table I contains the divisional and sub-divisional means of rainfall, temperatures, humidity and cloud amounts for the 13 chief political divisions and the 28 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 8·30 hours I.S.T. of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 8·30 hours I. S. T. of the date given in the succeeding column.

POONA 5,
dated the 9th March, 1951

C. RAMASWAMY,
for Director General of Observatories

	Rainfall				Departure from normal of				
							0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"	"	"		°	°	mb.	%	
1 Assam (including Manipur and Tripura)	15·59	14·15	+1·44	+ 10	−0·7	−0·7	0	+3	+0·6
2 West Bengal ...	17·61	14·37	+3·24	+ 23	−0·6	−0·5	−0·8	+3	+0·7
3 Orissa ...	11·40	12·72	−1·32	− 10	−0·2	0	−0·1	+3	+0·5
4 Bihar ...	12·96	12·97	−0·01	0	−0·4	−0·5	−0·1	+3	+0·7
5 Uttar Pradesh...	15·09	12·13	+2·96	+ 24	−0·2	−0·6	+0·3	+4	+0·4
6 Punjab(I)(including PEPSU and Delhi) ...	7·91	6·66	+1·25	+ 19	−1·3	−0·9	+0·5	+7	+0·7
7 Rajasthan ...	5·06	6·19	−1·13	− 18	−1·7	−1·1	−0·4	+3	−0·1
8 Madhya Bharat and Vindhya Pradesh	11·49	11·87	−0·38	− 3	+0·3	−0·4	−0·6	0	0
9 Madhya Pradesh	9·67	13·17	−2·50	− 21	+1·1	+0·5	−0·2	0	+0·3
10 Bombay (including Saurashtra & Kutch)	4·29	9·09	−4·80	− 53	+0·6	+0·2	−0·3	+1	−0·1
11 Hyderabad ...	5·14	6·03	−0·89	− 15	+2·9	+1·3	−0·2	−2	+0·1
12 Madras (including Travancore-Cochin)	6·23	5·84	+0·39	+ 7	+0·1	+0·4	+0·2	+1	+0·4
13 Mysore ...	15·13	7·79	+7·34	+ 94	−0·6	+0·4	+0·2	+4	+0·2
Mean of India ...	9·08	9·61	−0·53	− 6	+0·1	−0·1	−0·1	+2	+0·3
Sub-Division									
1 Bay Islands ...	13·66	16·29	−2·63	− 16	+0·7	+1·2	−0·5	−2	+0·5
2 Assam (including Manipur and Tripura)	15·59	14·15	+1·44	+ 10	−0·7	−0·7	0	+3	+0·6
3 West Bengal ..	17·61	14·37	+3·24	+ 23	−0·6	−0·5	−0·8	+3	+0·7
4 Orissa ...	11·40	12·72	−1·32	− 10	−0·2	0	−0·1	+3	+0·5
5 Chota Nagpur ...	16·96	13·75	+3·21	+ 23	−0·5	−0·4	+0·1	+3	+0·7
6 Bihar ...	11·35	12·66	−1·31	− 10	−0·4	−0·5	−0·3	+3	+0·7
7 Uttar Pradesh, East ...	13·31	12·13	+1·19	+ 10	−0·1	−0·5	+0·2	+2	+0·4
8 Uttar Pradesh, West ...	16·88	12·13	+4·75	+ 39	−0·3	−0·8	+0·5	+6	+0·4
9 Punjab (I) (including PEPSU and Delhi)	7·91	6·66	+1·25	+ 19	−1·3	−0·9	+0·5	+7	+0·7
10 Jammu and Kashmir	...	...	Data	incom	plete	...	...	...	...
11 Rajasthan, West	2·50	3·79	−1·29	− 34	−2·5	−1·7	+0·1	+4	−0·3
12 Rajasthan, East, (including Ajmer)	7·62	8·60	−0·98	− 11	−1·0	−0·6	−0·9	+1	+0·1
13 Madhya Bharat	6·07	10·92	−4·85	− 44	+0·7	−0·3	−0·8	−1	+0·1
14 Vindhya Pradesh	18·71	13·14	+5·57	+ 42	−0·2	−0·6	−0·4	+1	−0·2
15 Madhya Pradesh, East	11·27	13·65	−2·38	− 17	+0·1	+0·6	−0·1	+1	+0·7
16 Madhya Pradesh, West	8·67	11·24	−2·57	− 23	+1·6	+0·4	−0·3	−1	0
17 Gujarat ...	2·23	7·87	−5·64	− 72	+0·1	−0·1	−0·6	+2	0
18 Saurashtra and Kutch ...	1·10	3·90	−2·80	− 72	−0·9	−0·3	−1·0	+1	+0·1
19 Konkan ...	8·20	18·15	−9·95	− 55	+0·6	+0·8	+0·1	+2	−0·8
20 Deccan (Desh)	5·45	9·06	−3·61	− 40	+1·8	+0·3	+0·1	0	−0·1
21 Hyderabad, North ...	4·67	6·63	−1·96	− 30	+3·2	+1·5	−0·3	−2	+0·1
22 Hyderabad, South ...	5·61	5·43	+0·18	+ 3	+2·7	+1·1	−0·1	−1	+0·1
23 Coastal Andhradesa	3·89	5·06	−1·17	− 23	+1·2	+0·7	−0·2	−1	−0·4
24 Rayalaseema	4·99	3·85	+1·14	+ 30	+0·4	+0·3	+0·7	+2	−0·5
25 Tamilnad	5·43	3·51	+1·92	+ 55	−1·0	+0·4	+0·1	+2	+1·1
26 Malabar and South Kanara	13·30	20·34	−7·04	− 35	+0·5	+0·3	+0·5	+3	+0·7
27 Mysore ...	15·13	7·79	+7·34	+ 94	−0·6	+0·4	+0·2	+4	+0·2
28 Travancore-Cochin	12·70	9·31	+3·39	+ 36	+0·2	−0·2	+0·5	+4	+0·7

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Rel hur
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Bay Islands																				
Port Blair ...	259	999·6	0	997·5	(c) 84·1	+0·7	...	...	75·9	+1·2	71	24	81·5	79·2	77·2	76·1	29·6	−0·5	29·5	82
Assam																				
Dibrugarh ...	348	991·8	−0·7	988·1	87·7	+0·5	95	9,10	75·1	−0·8	72	30	79·7	82·4	77·5	78·9	31·6	+0·1	32·1	90
Sibsagar ...	317	993·1	−0·3	989·2	88·7	−0·1	93	5,14	77·3	−0·4	75	17,27,30	81·2	84·4	78·1	79·0	31·6	−1·0	31·2	87
Tezpur ...	258	995·1	−0·4	991·3	88·5	−0·9	95	5,9	76·9	−0·8	74	30	80·4	83·9	78·3	79·6	32·3	−0·1	32·3	91
Gauhati ...	182	996·9	−0·3	993·7	88·8	−1·5	94	8	76·7	−1·3	75	6 days	81·5	84·1	78·5	79·4	31·9	−0·5	32·5	87
Dhubri ...	115	999·3	−0·2	996·5	85·9	−0·4	91	8 days	78·0	−0·5	76	5 days	81·6	81·8	79·0	79·0	32·9	+0·4	32·3	88
Silchar ...	96	1001·0	−0·3	997·6	86·6	−2·9	92	4,9	76·5	−0·4	75	6 days	79·9	79·6	77·9	78·7	31·8	−0·4	33·0	91
Tura ...	1215	962·5	...	960·1	82·7	...	86	5	73·7	...	71	22	78·0	79·1	75·5	75·7	29·0	...	28·8	89
West Bengal																				
Dum Dum ...	33	1000·4	...	997·6	88·3	...	92	17	78·9	...	76	22,23	83·5	83·0	78·4	78·5	31·0	...	31·3	79
Calcutta ...	21	1000·8	−0·5	998·0	89·3	+0·3	93	17,24	79·1	+0·8	76	23	83·4	83·9	79·3	79·6	32·4	−0·7	32·6	83
Saugor Island ...	10	1001·2	−0·2	998·6	85·6	−1·3	88	9,17	79·4	−0·2	74	23	82·8	83·6	79·0	79·6	31·8	−1·4	32·7	84
Sandheads ...	32	1000·8	−0·3	998·4	...	...	...	...	...	...	...	...	83·2	83·9	79·4	80·1	32·6	−0·9	33·5	84
Midnapore ...	149	996·1	−0·6	993·1	88·9	−0·3	93	17,18,19	77·8	−0·6	74	23	82·1	82·8	78·8	78·7	31·8	−0·5	31·8	86
Contai ...	36	999·9	...	997·0	86·7	...	92	18	78·3	...	74	23	82·7	83·5	79·3	79·6	32·5	...	32·6	86
Burdwan ...	106	997·3	−1·0	994·3	88·4	−0·8	93	25	78·4	−0·5	76	4 days	81·8	82·9	78·7	79·0	32·3	−0·5	31·9	87
Krishnagar ...	48	999·8	−1·0	997·0	89·4	−0·1	93	27,28	77·4	−1·0	74	22	81·9	83·8	79·6	80·2	33·2	0	33·8	90
Asansol ...	414	986·7	−0·6	983·8	87·9	−0·9	92	19,22	77·5	0	75	18	81·4	82·7	78·8	78·9	32·6	+0·1	32·8	89
Berhampore ...	62	999·2	−0·8	996·2	89·0	−0·1	92	7 days	78·5	−0·3	76	3,20,23	82·5	84·0	79·6	79·7	33·0	−0·4	32·4	87
Malda ...	103	998·0	−1·0	995·1	87·3	−1·8	91	8,9	78·2	−0·9	75	22	81·9	83·1	78·8	79·3	32·4	−1·1	32·1	87
Cooch Behar ...	145	998·1	...	994·9	87·4	...	94	8	77·1	...	74	9	80·9	82·7	78·1	78·7	31·3	...	31·7	88
Jalpaiguri ...	271	993·5	−0·4	990·4	...	...	...	...	75·5	−1·8	72	20	78·5	82·8	76·2	78·5	29·5	−3·0	31·1	90
Orissa																				
Balasore ...	65	999·4	−0·1	996·6	88·1	−0·2	92	17,18	78·5	+0·1	76	10,11,31	82·1	83·8	78·7	79·2	31·8	−0·5	32·2	86
Chandbali ...	20	1001·4	−0·1	998·6	89·4	+1·1	93	7 days	79·0	+0·6	75	31	82·6	84·7	79·3	79·8	32·8	+0·2	32·4	85
Puri ...	20	1002·1	+0·5	999·5	87·6	0	90	7 days	79·8	+0·2	75	8,31	84·1	83·8	80·2	80·0	33·3	+0·6	33·4	84
Cuttack ...	87	999·6	+0·2	996·2	88·6	−0·4	93	17,19,25	77·7	−0·4	74	31	81·4	83·8	77·5	78·2	30·5	−0·7	30·4	83
Gopalpur ...	56	1001·3	+0·7	998·4	87·3	−0·5	91	4	78·4	−0·4	75	18	82·8	83·0	79·1	79·5	32·3	+0·2	32·8	85
Angul ...	455	987·0	+0·5	984·1	86·8	−0·8	92	25	76·9	0	74	26	80·0	82·0	76·5	76·8	29·6	−0·5	29·1	85
Sambalpur ...	486	985·6	0	983·1	86·4	−0·3	92	22,28	76·9	0	72	9	80·4	82·3	77·1	77·7	30·0	−0·2	30·5	86
Jharsuguda ...	726	977·1	...	974·2	...	...	...	...	...	...	...	...	80·8	81·3	77·7	77·6	31·2	...	30·9	86
Titilagarh ...	691	979·5	...	976·9	86·6	...	95	22	76·1	...	73	22	79·3	82·7	75·4	76·5	28·1	...	28·7	83
Chota Nagpur																				
Purulia ...	835	973·0	...	969·9	87·1	...	91	25,26,28	76·3	...	73	24	80·6	82·2	77·8	79·4	31·0	...	32·7	88
Jamshedpur ...	423	986·8	−0·5	983·8	88·3	−0·6	92	25	77·7	−0·3	75	19,31	80·8	82·5	77·5	77·7	30·4	−0·4	29·9	85
Chaibasa ...	742	995·9	−0·2	972·9	87·6	−0·7	92	22,25,26	76·5	−0·4	72	19	79·7	83·6	76·6	77·6	30·0	−0·1	30·1	86
Ranchi ...	3,150	930·0	+0·3	927·2	83·5	+0·2	88	25,27	72·3	−0·5	71	10 days	76·6	78·0	74·0	74·4	27·7	+0·6	27·7	89
Hazaribagh ...	2,006	933·9	−0·9	931·5	83·5	−0·5	89	26	72·9	−0·4	71	4 days	76·9	78·3	74·3	74·8	28·0	+1·1	28·0	89
Daltonganj ...	725	976·2	−0·5	973·2	87·9	−0·8	94	24,26	76·6	−0·3	74	14	81·5	83·2	77·5	78·1	30·4	+0·3	30·7	83
Dhanbad ...	839	972·4	...	...	86·8	...	92	22	75·6	...	71	18	80·5	...	77·8	...	31·6	...	...	88
Bihar																				
Purnea ...	134	997·5	−0·6	994·3	88·1	−1·0	93	8,9	78·0	−0·5	76	6 days	82·3	83·8	79·3	79·8	32·8	−0·6	33·0	87

(c) Mean of 28 days

Cloud amount (Oktas)			Rainfall, inches				No of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from:—																	STATION
											0830 hrs. I. S. T.										1730 hrs. I. S. T.								
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bay Islands
7·1	+0·5	7·3	13·66	−2·63	5·14	24	15	−5·9	11·9	−1·5	0	0	1	3	1	17	9	0	0	0	0	1	0	3	13	13	1	2	Port Blair
																													Assam
6·8	+0·5	6·1	19·39	+1·63	2·83	23	20	+1·3	1·5	+0·5	3	4	6	1	4	2	2	4	5	2	1	3	1	1	1	2	1	19	Dibrugarh
7·5	+0·5	6·3	22·23	+5·86	3·57	15	18	−0·1	3·5	+1·5	7	9	2	1	4	2	1	2	3	3	5	4	4	6	4	0	2	3	Sibsagar
6·7	+0·2	5·5	16·16	+3·14	2·53	18	23	+7·1	2·1	+0·7	0	2	14	6	2	1	3	1	3	0	1	6	2	1	2	3	0	16	Tezpur
6·9	+0·8	6·3	10·25	−0·01	1·89	28	14	+0·9	1·9	+0·6	6	3	5	5	2	1	1	3	5	0	4	1	5	2	5	2	3	9	Gauhati
6·1	+0·3	6·4	12·86	−0·43	3·10	29	17	+2·4	4·7	+1·2	1	8	8	7	4	1	0	0	2	1	4	3	6	5	4	2	1	5	Dhubri
7·5	+1·1	6·9	17·57	−2·69	1·23	6,18	26	+3·8	1·1	−0·4	0	3	1	0	1	0	1	0	25	1	1	1	0	0	2	3	1	22	Silchar
7·8	...	7·4	21·43	...	4·03	3	23	...	3·5	...	0	2	1	5	4	10	4	1	4	0	2	2	3	4	10	3	0	7	Tura
																													West Bengal
7·1	...	7·4	10·36	...	1·86	3	19	...	7·4	...	0	0	3	5	9	10	3	0	1	0	1	0	4	10	11	2	1	2	Dum Dum
6·7	0	7·3	7·65	−5·27	1·55	3	14	−4·0	3·8	+0·4	0	1	2	1	7	17	1	1	1	0	0	3	6	7	8	1	0	6	Calcutta
5·9	−0·9	5·7	14·46	+1·18	3·37	23	15	−1·3	16·5	+5·9	0	1	0	1	4	17	4	2	2	0	0	0	1	11	16	1	1	1	Saugor Island
6·9	+1·1	7·2	11·84	+3·00	4·35	31	9	−3·0	...	...	1	1	0	0	1	23	3	2	0	0	0	0	0	2	26	3	0	0	Sandheads
6·8	+1·1	7·1	14·48	+1·73	2·83	2	21	+4·2	3·5	+1·3	1	2	0	1	10	7	2	1	7	0	3	0	2	12	9	0	1	4	Midnapore
6·7	...	7·2	15·21	...	5·00	29	18	...	8·0	...	0	1	0	2	3	19	3	1	2	0	1	0	3	9	15	1	0	2	Contai
6·5	−0·1	6·9	18·08	+6·16	4·68	11	19	+2·8	4·9	+2·6	0	1	7	1	5	13	2	0	2	0	2	4	4	7	8	2	1	3	Burdwan
7·6	+1·4	7·2	9·00	−1·38	1·47	10	19	+3·7	4·0	+0·5	0	1	4	1	21	2	0	0	2	0	2	2	8	12	3	0	0	4	Krishnagar
7·3	+0·7	7·3	14·24	+0·96	4·83	11	20	+3·0	4·2	−0·5	0	2	6	4	7	6	3	0	3	0	3	6	5	2	3	5	3	4	Asansol
7·3	+0·7	7·5	20·30	+8·89	3·18	2	21	+4·7	3·0	0	0	1	10	2	12	0	0	0	6	1	0	6	7	10	4	0	1	2	Berhampore
7·4	+1·8	7·0	12·78	+1·76	2·49	13	19	+4·4	4·7	0	0	1	13	4	5	5	1	0	2	1	2	11	5	6	2	2	0	2	Malda
7·4	...	7·0	33·71	+9·97	8·45	14	23	+4·3	3·2	...	0	3	11	5	4	0	0	1	7	2	2	6	5	7	1	0	0	8	Cooch Behar
6·7	+1·7	5·8	37·41	+12·14	6·83	17	23	+2·6	4·7	+3·0	1	7	13	4	1	1	0	1	3	0	3	12	7	4	2	1	0	2	Jalpaiguri
																													Orissa
7·8	+2·0	8·0 (a)	4·42	−7·34	0·77	23	14	−0·8	7·4 (b)	+3·8	1	0	0	0	6	23	1	1	0	0	0	0	4	8	15	1	0	3	Balasore
5·4	−0·7	4·9	12·56	−2·11	3·16	7	14	−1·8	6·8	+0·2	0	0	0	3	4	18	4	2	0	0	0	0	5	6	15	3	1	0	Chandbali
6·1	+0·5	7·1	10·06	−0·86	3·57	31	12	−0·9	14·2	+4·3	0	0	0	1	1	17	10	1	1	0	0	0	0	6	17	7	1	0	Puri
5·9	−0·1	7·3	15·68	+2·28	2·90	31	17	+1·2	4·5	+2·3	0	0	0	0	3	4	6	0	18	0	0	0	0	2	4	4	1	20	Cuttack
6·4	+1·4	6·8	6·52	−1·18	1·51	1	12	+1·2	7·6	−0·1	0	0	0	0	6	15	4	0	6	1	0	0	1	9	13	3	1	3	Gopalpur
7·1	+1·1	6·9	14·90	+3·34	3·71	4	17	+1·9	5·5	+0·6	1	0	1	1	1	3	8	6	10	1	0	0	2	1	5	13	8	2	Angul
5·6	−1·0	5·8	15·65	−3·39	2·73	4	16	−2·9	4·5	+0·9	0	0	0	2	7	16	3	3	0	1	0	2	2	4	10	10	2	0	Sambalpur
7·5	...	7·9	13·87	...	3·27	10	17	...	...	...	0	0	2	1	0	6	8	1	13	0	0	0	0	1	7	11	3	9	Jharsuguda
6·2	...	6·7	10·99	...	2·23	4	14	...	2·9	...	1	0	0	2	8	13	4	1	2	0	0	0	3	4	11	6	1	6	Titilagarh
																													Chota Nagpur
6·7	...	7·2	13·54	...	3·94	4	20	...	3·0	...	4	2	2	4	7	4	4	3	1	0	5	3	7	3	5	1	5	2	Purulia
7·1	+0·2	7·5	20·27	+4·86	5·53	12	16	−2·0	5·0	+1·0	0	1	3	1	0	9	9	2	6	3	0	5	2	0	5	6	3	7	Jamshedpur
7·5	+1·1	7·7	15·45	+3·21	4·29	12	16	−0·6	2·3	+0·2	0	2	0	0	0	18	1	2	8	0	3	1	1	0	15	2	1	8	Chaibasa
6·9	+0·2	7·0	14·76	+0·92	3·35	30	19	+0·4	3·3	−1·3	2	1	0	0	7	4	2	0	15	4	0	0	3	1	2	3	0	18	Ranchi
6·8	−0·4	7·1	10·36	−3·85	3·80	13	18	+0·4	5·1	−0·8	1	3	3	2	2	9	2	7	3	5	2	3	2	3	3	3	7	3	Hazaribagh
6·4	+1·4	7·1	17·36	+3·85	4·39	13	13	−3·4	3·1	−0·2	0	0	3	3	3	2	11	6	3	4	4	3	1	0	0	10	3	6	Daltonganj
...	...	...	12·78	...	1·98	30	15	...	4·1	...	1	4	4	5	1	6	3	2	6	...	...	...	...	...	...	...	...	...	Dhanbad
																													Bihar
6·9	+1·1	6·4	13·94	−0·21	2·13	21	20	+3·8	3·5	+1·2	1	0	14	3	0	2	0	0	6	0	0	9	2	0	0	2	0	18	Purnea

(a) Mean of 30 days. (b) Mean of 29 days.

STATION	Height of bar, cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Rela humi %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Bihar (Contd.)																					
Darbhanga ...	161	995·8	−0·6	992·9	89·4	+0·3	94	9	78·5	−0·6	73	4	83·0	84·6	79·8	80·5	33·6	+1·1	35·9	87	+5
Motihari ...	218	994·0	−0·7	990·6	89·3	−0·1	95	8	77·3	−1·0	75	4 days	82·9	85·1	78·8	80·3	31·9	−0·7	32·8	83	+1
Patna ...	173	994·9	−0·7	992·0	88·9	−0·2	94	27	79·1	−0·6	75	29	83·5	85·0	79·2	79·6	31·8	−1·5	31·9	82	0
Dehri ...	352	988·4	...	985·6	89·1	...	95	27	78·6	...	75	31	81·1	84·3	79·0	79·9	33·0	...	32·7	90	..
Gaya ...	365	988·0	−0·8	985·0	89·4	−0·5	95	27	78·1	−0·1	74	6	82·3	85·0	78·6	79·7	31·6	+0·5	32·3	85	+8
Dumka ...	489	984·3	−0·9	981·5	87·7	−0·8	92	22,26	76·9	−0·7	72	23	81·6	82·2	78·3	77·8	31·3	−0·6	30·4	86	+3
Sabour ...	122	996·7	−1·1	993·7	88·2	−0·8	92	8,27	78·7	−0·5	75	28	82·6	83·9	79·8	80·1	33·2	−0·4	33·1	88	+3
U. P., East																					
Gonda ...	360	988·9	...	985·8	89·9	+0·1	94	11,23,24	78·4	−0·1	75	1	82·3	85·1	79·1	80·3	32·3	−0·1	33·0	87	+3
Gorakhpur ...	254	992·4	−0·5	989·8	89·5	−0·1	94	8,9	77·9	−0·8	75	1,5	83·1	85·5	79·2	80·3	32·3	−0·4	33·1	83	−3
Azamgarh ...	255	991·0	...	989·1	90·0	...	95	25	80·7	...	76	16	82·6	84·7	79·8	80·7	33·5	...	33·9	88	...
Banaras ...	250	992·1	−0·4	989·0	89·3	−0·3	96	26	77·8	−0·7	75	3,16,17	82·0	84·6	79·3	80·2	33·1	−0·3	33·2	88	+4
Allahabad (Bamrauli) ...	322	989·6	−0·4	986·8	89·7	+0·3	97	25,26	78·0	−0·5	75	16	82·4	86·0	78·9	80·2	32·1	−0·4	32·6	86	+2
Fatehpur ...	375	988·2	...	985·0	89·8	+0·1	96	25,26,28	78·5	0	76	14,15	82·0	85·4	78·7	80·4	35·2	+2·5	33·2	86	+1
Banda ..	398	987·6	...	984·7	90·0	...	97	25	77·7	...	75	14,31	82·1	85·1	78·3	79·1	31·4	...	31·2	84	...
Kanpur ...	414	986·9	+0·1	983·8	90·1	+0·4	95	23,24	77·8	−0·9	76	4 days	81·8	85·0	78·1	78·8	31·4	−0·8	31·1	84	−3
Lucknow ...	371	988·4	+0·1	985·3	89·4	−1·1	95	25,26	78·6	0	77	7 days	81·9	84·0	79·1	79·8	32·9	+0·6	33·5	88	+5
Bahraich ...	407	987·3	0	985·1	89·9	−0·2	94	11,12	77·6	−0·8	70	1	82·1	85·3	78·8	80·4	32·1	+0·2	33·1	86	+4
U. P., West																					
Jhansi ...	823	974·1	+0·5	970·6	89·4	+0·1	98	25	76·5	−0·4	73	20	79·9	84·7	76·2	77·7	29·4	0	29·2	84	+4
Agra ...	553	982·0	−0·1	979·1	91·0	−0·4	98	24	78·0	−0·9	75	19	82·4	86·4	77·3	78·9	29·8	+0·2	29·2	80	+3
Mainpuri ...	516	983·4	+0·1	979·0	90·4	−1·4	98	24	78·1	−0·4	75	18,28	81·3	85·3	79·8	82·1	34·0	+2·5	35·6	92	+1
Aligarh ...	615	979·9	..	976·9	91·8	+0·3	97	24,25	77·3	−1·0	75	4 days	82·1	87·7	78·4	80·7	31·4	+0·8	32·6	88	+1
Bareilly ...	568	981·2	−0·7	978·2	90·5	+0·3	96	24,25	77·7	−0·5	74	1	81·7	86·4	77·9	79·9	30·8	−1·0	32·0	84	0
Meerut ...	728	975·8	...	...	87·3	...	97	24	77·9	...	75	6 days	81·2	...	76·9	...	29·9	...	...	83	...
Roorkee ...	899	970·1	−0·7	966·9	89·4	−0·3	96	7	75·5	−1·6	71	27	78·9	86·7	76·8	80·0	30·7	+0·5	31·9	91	+9
Dehra Dun ...	2,239	926·6	−0·5	923·0	83·5	−0·7	90	6	72·4	−0·5	70	24	75·6	78·7	73·8	75·5	27·8	+0·6	28·7	92	+7
Punjab (I)																					
New Delhi ...	710	976·1	−0·7	973·2	92·5	−0·5	98	25,26	78·4	0	74	29	82·0	89·3	76·5	79·0	28·7	−1·2	28·8	77	0
Hissar ...	725	975·6	−0·4	972·9	95·3	−1·0	103	27,28	77·5	−1·5	74	3	81·8	92·3	77·2	81·2	30·0	+1·0	31·5	81	+1
Karnal ...	818	972·8	...	969·5	89·9	...	96	21	77·3	...	75	5 days	79·9	91·5	76·8	79·7	30·2	...	29·4	85	...
Ambala ...	892	969·4	−1·2	966·9	91·6	−1·6	97	6,7	77·1	−0·9	74	2	80·8	88·7	77·8	81·3	31·1	+0·6	32·9	86	+7
Patiala ...	822	972·3	...	969·0	91·1	...	96	11,7,25	76·8	...	73	6 days	81·1	87·7	77·6	80·8	30·6	...	32·7	85	...
Ludhiana ...	811	972·7	−0·4	969·8	92·9	−2·0	99	25	78·0	−1·2	73	29	81·9	89·7	78·1	81·3	31·3	+1·5	32·5	84	+9
Ferozepore ...	657	977·0	...	974·3	95·8	...	103	28	79·1	...	71	3	84·0	91·3	78·1	79·8	30·0	...	29·5	77	...
Amritsar ...	769	972·7	...	970·1	93·4	...	99	28	78·3	...	75	4 days	82·9	90·5	79·7	83·1	33·2	...	35·1	85	...
Jammu & Kashmir																					
Srinagar ...	5,205	835·2	−0·3	832·0	85·1	−1·5	91	30	64·5	+1·2	59	25	69·9	81·1	66·1	70·1	20·7	+0·7	30·2	83	0
Gulmarg ...	8,709	736·4	−0·8	...	66·7	−2·2	73	15	49·9	−1·7	42	24	58·2	...	55·5	...	14·1	+0·2	...	85	+4
Dras (R) ...	10,059																				
Leh ...	11,529	664·6	−0·8	661·3	75·5	−0·4	81	1	49·2	−0·5	46	4 days	59·8	70·0	50·3	55·5	9·5	−0·2	9,7	54	−5
Skardu (R) ...	7,505																				
Gilgit (R) ...	4,890																				
Miegar (R) ...	10,190																				

(R) Register not received.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from ;—																	STATION
											0830 hrs. I. S. T.										1730 hrs. I. S. T.								
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bihar *(Contd.)*
6·9	+0·8	6·5	13·88	+0·37	3·40	28	16	+2·2	3·1	−0·1	0	10	9	2	1	0	0	0	9	0	2	3	2	0	0	2	0	17	Darbhanga
6·0	+0·9	6·1	12·93	−0·04	3·30	16	14	+0·8	3·2	−0·6	0	1	14	0	0	3	7	0	6	0	0	7	1	0	1	4	1	17	Motihari
6·2	−0·7	6·7	11·78	−1·31	3·67	15	14	+0·1	5·4	+1·5	3	10	3	5	1	5	1	1	2	6	12	3	2	0	3	2	1	2	Patna
6·8	...	7·7	14·21	+0·99	3·32	13	15	+0·4	3·5	...	2	1	3	5	2	8	1	7	2	4	4	3	1	2	4	0	9	4	Dehri
6·8	+1·6	7·3	11·39	−2·36	2·89	13	16	+0·3	6·5	+1·2	3	2	6	4	5	5	4	1	1	5	3	5	2	4	1	4	5	2	Gaya
3·4	−2·4	5·3 (a)	12·43	−0·51	2·04	18	15	−2·6	...	...	0	3	5	11	0	8	4	0	0	0	1	5	13	1	3	6	2	0	Dumka
7·0	+0·4	7·0	6·62	−3·89	1·13	3	13	−2·0	6·3	+0·7	1	2	12	5	5	6	0	0	0	1	1	14	5	3	3	2	1	1	Sabour
																													U. P., East
6·1	−0·1	6·1	11·43	−4·22	2·16	14	17	+3·5	2·5	−1·1	0	2	14	1	0	0	3	2	9	1	0	5	0	0	1	1	1	22	Gonda
5·6	+0·8	5·6	10·30	−3·45	1·76	15	16	+1·1	2·9	+0·9	1	5	13	0	0	2	3	1	6	2	2	7	2	1	1	6	0	10	Gorakhpur
6·1	...	7·2	10·88	...	1·76	11	16	...	...	...	0	0	12	0	1	5	1	0	12	0	0	10	1	0	0	0	0	20	Azamgarh
6·2	−0·3	6·8	19·27	+7·26	3·91	14	17	+2·1	5·4	+2·2	1	1	6	2	0	9	8	2	2	2	2	5	2	0	4	11	5	0	Banaras
6·6	−0·2	7·4	14·59	−4·56	5·72	14	19	+4·3	3·8	−0·5	0	2	5	1	0	9	9	2	3	3	1	4	0	1	2	14	3	3	Allahabad (Bamrauli)
5·6	−0·4	6·2	10·40	+0·37	3·76	3	11	−3·4	3·1	−0·1	0	0	7	0	0	2	13	4	5	0	0	4	0	0	4	12	0	11	Fatehpur
4·8	...	6·3	12·89	...	4·51	13	16	...	2·7	...	1	3	1	1	3	8	12	1	1	0	1	3	0	4	5	14	3	1	Banda
6·2	+1·6	6·6	12·49	+1·29	2·04	2	16	+2·7	5·4	−1·0	0	0	3	3	0	7	13	1	4	0	3	1	1	0	5	10	2	9	Kanpur
5·9	0	6·6	12·65	+1·15	2·56	11	16	+2·3	1·9	0	1	2	5	3	3	4	10	1	2	1	3	2	3	1	4	5	1	11	Lucknow
6·5	+2·0	7·6	15·42	+2·63	4·21	11	17	+4·5	3·1	+0·9	0	1	8	9	0	1	1	1	10	1	1	2	5	0	2	1	4	15	Bahraich
																													U. P., West
4·4	−0·6	5·0	21·92	+10·33	5·55	30	14	+0·7	4·2	+0·7	0	3	0	0	1	2	15	3	7	0	2	0	0	0	3	11	2	13	Jhansi
5·0	−0·6	5·0	12·00	+3·89	1·73	2	14	+3·7	2·9	−0·8	0	0	2	1	0	0	2	1	25	1	3	1	0	3	7	0	0	16	Agra
7·3	+1·8	6·5	11·92	+2·87	2·28	13	14	+3·5	2·3	+0·4	0	1	4	3	0	5	10	4	4	1	0	4	6	1	2	7	2	8	Mainpuri
5·9	+1·3	6·1	6·54	−1·39	1·37	31	12	+2·6	4·0 (l)	...	0	0	5	0	1	1	7	0	17	0	0	5	0	0	1	9	1	15	Aligarh
6·5	+0·6	7·3	13·22	+1·62	3·70	30	15	+2·7	2·4	+0·6	2	1	3	5	1	1	5	9	4	1	2	2	2	2	1	11	4	6	Bareilly
5·4	...	...	7·93	−0·87	1·50	13,29	9	−0·8	3·7	...	1	2	4	2	0	0	4	3	15	...	...	...	...	...	...	...	...	...	Meerut
5·2	−0·1	4·0	24·07	+12·85	5·00	9	19	+7·2	2·7	+0·7	0	2	0	13	0	1	0	2	13	0	0	0	12	0	2	0	4	13	Roorkee
6·7	+0·2	6·4	37·44	+8·65	3·25	11	26	+4·7	1·4	0	0	1	2	3	0	4	0	0	21	0	2	0	4	4	4	3	2	12	Dehra Dun
																													Punjab (l)
6·2	+1·7	5·7	6·86	−0·37	1·82	30	12	+3·0	6·3	...	0	1	4	2	1	2	13	5	3	1	2	3	1	3	5	7	3	6	New Delhi
2·2	−0·8	2·4	3·20	−1·67	1·26	11	5	−0·5	4·6	−0·3	4	1	1	3	4	12	4	2	0	2	3	2	2	1	8	7	4	2	Hissar
5·7	...	3·7	6·66	...	1·54	13	9	...	2·2	...	1	5	4	4	2	3	8	2	2	0	4	2	3	0	3	6	5	8	Karnal
5·6	+0·9	3·6	17·27	+9·38	3·02	9	13	+4·0	3·4	+1·1	0	1	6	1	0	0	2	0	21	0	0	0	2	0	0	1	0	28	Ambala
5·1	...	4·5	15·78	...	3·85	1	10	...	3·4	...	1	1	5	7	3	2	5	3	4	0	1	3	8	2	1	3	6	7	Patiala
4·9	+1·2	4·9	7·95	+1·30	4·23	2	9	+1·7	1·7	+0·2	0	3	3	8	0	5	4	1	7	0	2	0	6	0	4	0	6	13	Ludhiana
3·3	...	2·9	6·01	...	3·35	3	4	...	1·0	...	0	0	0	2	7	7	0	0	15	2	4	0	3	4	8	1	2	7	Ferozepore
4·4	...	3·7	5·70	...	2·45	11	7	...	5·8	...	2	3	10	12	2	1	0	1	0	2	4	6	6	2	2	3	4	2	Amritsar
																													Jammu & Kashmir
4·9	+1·1	4·1	2·65	+0·23	0·61	2	4	−1·3	1·6	−0·7	0	2	3	6	2	1	1	1	15	3	0	0	1	0	1	0	12	14	Srinagar
4·8	+0·6	...	5·69	+1·05	1·11	6	12	+2·1	3·0	+0·3	2	4	5	4	3	6	4	1	2	...	...	..	...	...	...	...	...	...	Gulmarg
																													Dras (R)
4·5	+0·7	4·0	1·63	+1·04	0·84	12	4	+2·1	3·0	+1·3	1	1	0	1	0	5	0	0	23	0	2	0	1	0	9	7	1	11	Leh
																													Skardu (R)
																													Gilgit (R)
																													Misgar (R)

(a) Mean of 30 days. (l) Mean of 19 days.

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relat humid %	
		Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Rajasthan, West																					
Sri Ganganagar ...	580	979·6	...	976·8	96·3	−3·6	102	28	77·9	−2·5	71	2	83·7	92·1	77·6	80·0	29·0	+1·0	29·4	75	+12
Bikaner ...	734	975·3	−0·3	972·3	93·6	−4·0	99	5 days	77·7	−2·7	74	10,11	81·5	92·3	75·3	77·1	27·2	−1·5	25·2	74	+2
Jaisalmer ...	793	972·8	...	970·1	93·9	...	101	27	75·7	...	74	21,22	79·3	92·3	76·9	84·6	30·2	...	36·7	89	...
Jodhpur ...	736	976·9	+1·6	973·7	90·3	−1·5	96	31	76·0	−1·0	72	20,21	78·9	89·2	74·4	76·4	27·1	−0·5	25·1	80	+1
Phalodi ...	783	974·4	...	972·1	94·4	...	100	28	78·3	...	74	21	80·2	93·0	75·2	80·5	27·4	...	28·7	79	...
Barmer ...	638	979·7	+0·2	976·6	91·8	−0·7	97	27	76·5	−0·4	73	22,23	79·4	90·5	74·9	79·1	29·0	+1·3	28·5	80	+1
Rajasthan, East																					
Sikar ...	1419	954·1	...	950·6	92·3	...	98	26,27,28	75·4	...	72	12,21	79·1	86·6	74·5	77·1	27·2	...	28·5	73	..
Jaipur ...	1431	953·4	−0·5	950·7	88·9	−2·0	98	27	74·6	−1·1	71	19,20,21	79·1	84·7	74·5	75·5	27·1	−0·4	26·1	79	+1
Ajmer ...	1593	948·3	−0·3	945·6	87·1	−0·6	94	28	75·3	−0·7	71	30	77·2	85·0	72·3	74·6	24·8	−1·7	25·0	79	+1
Kotah ...	843	973·2	+0·1	970·4	88·0	−1·6	95	25,26	77·5	−0·2	75	31	80·1	85·5	75·3	77·0	27·8	0	27·8	79	+4
Jhalawar ...	1053	966·2	−0·2	963·2	87·2	+0·1	95	24,27	74·6	−0·4	71	21	77·5	84·8	73·9	75·7	27·1	−1·3	26·4	83	−1
Udaipur ...	1910	938·8	...	936·3	83·5	...	90	29	71·8	...	66	22,23	75·3	80·9	71·0	73·1	25·5	...	25·0	80	..
Madhya Bharat																					
Gwalior ...	681	977·5	...	975·0	89·5	...	98	27	77·2	...	74	13	81·8	85·7	77·1	78·3	29·7	...	29·8	80	..
Guna ...	1571	949·0	−0·2	946·9	84·2	+1·1	93	25,27	73·1	−0·5	69	21	76·0	81·8	73·1	75·2	26·6	−0·9	27·2	87	+1
Neemuch ...	1626	948·4	+0·2	946·1	84·8	0	91	26	72·6	−0·2	70	4 days	75·2	81·4	73·5	74·5	26·2	−0·1	26·3	88	+1
Ratlam ...	1596	950·0	...	947·5	83·1	...	88	26	72·1	...	69	23	73·2	80·9	71·9	75·2	26·3	...	27·5	93	..
Indore ...	1839	941·9	−0·1	939·1	85·2	+2·6	93	24	70·8	−0·5	66	22,23,24	74·4	82·6	70·8	72·8	24·3	−1·2	23·5	84	−
Bhopal ...	1643	947·7	0	944·9	85·4	+1·3	94	27	73·3	+0·1	71	23,30,31	76·1	82·5	72·0	73·5	25·4	−0·9	25·0	82	−
Bairagarh ...	1714	945·4	+0·1	942·6	85·9	+2·3	93	27	72·5	−0·1	69	20,23,24	75·6	82·4	71·6	72·8	24·9	−2·1	23·7	82	−
Madhosagar ...	757	975·3	...	972·4	89·0	...	97	27	77·3	...	75	13	81·2	85·4	76·9	78·3	29·6	...	29·8	81	..
Vindhya Pradesh																					
Nowgong ...	750	976·1	+0·1	973·0	87·6	−0·5	96	25,26	76·0	−0·9	73	19,20	80·0	84·2	76·3	77·8	29·3	−0·6	29·6	84	+
Sutna ...	1041	965·7	−0·2	963·0	86·8	+0·8	94	26,27	75·8	−0·4	73	2,14	79·4	83·1	75·8	77·1	29·4	−0·1	29·1	85	+
Umaria ...	1506	950·8	...	948·4	84·0	−0·9	94	27	73·9	−0·5	71	2	77·2	80·8	74·0	75·4	27·4	−0·5	27·8	85	+
Madhya Pradesh East																					
Gondia ...	1026	968·4	...	965·7	85·3	...	93	25	75·7	...	73	31	79·1	82·5	75·6	76·7	28·7	...	28·7	85	.
Pendra ...	2040	933·5	−0·1	931·0	81·8	−0·4	88	22	72·6	+0·7	71	5 days	76·6	78·0	73·3	74·3	26·7	+0·2	27·5	86	+
Champa ...	805	975·0	...	972·1	86·5	...	95	25	76·2	...	74	7,31	79·1	82·3	76·4	77·0	29·8	...	29·3	88	.
Raipur ...	979	969·6	+0·3	966·7	84·4	−1·4	93	25	75·1	+0·3	71	31	78·2	82·1	75·1	75·8	28·0	−0·7	27·7	86	(
Kanker ...	1318	959·2	+0·5	956·4	84·2	−0·2	91	22	74·8	+1·1	73	7 days	77·9	80·7	74·4	75·6	27·5	+0·4	28·0	84	+
Chanda ...	634	982·9	+0·4	978·9	88·9	+1·6	94	23,27	75·7	+0·5	73	4 days	79·7	82·5	74·4	76·5	26·8	−0·9	28·4	77	−
Jagdalpur ...	1815	943·1	+0·4	939·8	84·0	+1·1	91	21,22	71·9	+0·6	70	5 days	76·0	79·1	73·5	73·8	27·2	+0·3	26·3	89	+
Madhya Pradesh West																					
Buldhana ...	2133	933·3	...	930·2	85·7	...	95	23	70·8	...	67	18	73·2	82·5	69·4	72·1	23·0	...	22·6	82	.
Akola ...	925	972·9	−0·1	969·0	92·1	+4·7	100	23,25	74·4	+0·7	71	15,16	78·9	88·8	72·8	75·3	24·8	−1·0	23·8	73	−
Amravati ...	1213	963·1	+0·1	959·6	88·8	+2·9	97	23	74·1	+1·0	71	17	77·3	85·8	72·2	74·4	24·7	−1·1	23·9	77	−
Yeotmal ...	1481	953·9	...	951·0	88·5	...	96	23	71·6 (a)	...	68	23	76·5	84·0	72·5	74·1	25·5	...	24·3	82	.
Khandwa ...	1044	968·5	0	965·2	88·4	+2·6	98	24	74·0	0	70	21	78·1	85·3	73·0	75·1	25·5	−0·7	25·1	77	.
Hoshangabad ...	992	969·5	−0·3	966·5	86·3	+1·3	96	27	74·2	−0·3	72	20,31	76·7	83·8	73·8	76·2	27·2	−0·7	27·4	87	−
Sagar ...	1808	941·4	0	938·8	82·7	−0·7	91	25,26	72·6	0	70	30	74·7	79·5	72·0	73·3	25·6	−0·6	25·4	89	−
Jabalpur ...	1289	958·8	+0·3	956·1	84·8	+0·3	94	4 days	79·5	+0·9	72	6	77·3	81·4	74·1	75·1	27·3	+0·1	26·9	86	−
Seoni ...	2037	934·9	+0·1	932·4	82·8	+0·1	91	23,25	72·3	+0·8	70	19,31	75·6	79·7	72·2	73·5	26·0	+0·3	25·5	85	−

(a) Mean of 30 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																					STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.											
Mean 0830 hrs. I.S.T	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52				53
																																Rajasthan, West
0·8	−0·9	2·3	3·77	+1·72	1·81	2	6	+2·7	4·6	−1·3	1	0	1	3	4	20	1	0	1	0	1	3	0	4	16	1	1	5				Sri Ganganagar
1·9	−1·1	2·5	6·25	+2·65	3·85	10	6	+1·1	7·1	+0·8	0	1	0	1	1	26	0	2	0	0	3	0	3	0	24	0	0	1				Bikaner
3·9	...	2·6	0·79	...	0·72	9	1	...	17·2	...	0	0	0	0	0	31	0	0	0	1	1	0	1	0	28	0	0	0				Jaisalmer
5·7	−0·3	4·8	1·08	−3·76	0·65	6	3	−2·9	7·0	−2·1	0	0	0	0	0	27	2	2	0	1	1	0	0	0	26	3	0	0				Jodhpur
2·3	...	2·6	0·50	−2·67	0·18	7	3	−1·4	13·3	...	0	0	0	0	4	26	1	0	0	0	0	0	1	8	19	2	1	0				Phalodi
6·5	+1·1	4·3	0·89	−4·38	0·39	7	3	−2·8	8·7	+2·3	0	0	0	0	3	24	2	0	2	1	0	0	0	3	26	1	0	0				Barmer
																																Rajasthan, East
4·9	...	5·5	3·97	...	0·75	31	7	...	5·8	...	2	1	1	1	3	9	13	1	0	0	1	0	1	3	13	8	1	4				Sikar
5·3	−0·1	6·5	5·49	−2·57	1·78	6	7	−3·2	4·9	+0·4	2	1	0	0	0	1	8	17	2	3	1	0	1	0	10	11	4	1				Jaipur
5·4	+0·4	5·0	6·96	+0·21	2·27	7	8	−0·4	7·5	+3·4	0	1	0	0	0	19	9	0	2	0	2	0	0	2	15	8	2	2				Ajmer
6·4	+1·2	5·4	11·33	+1·67	2·69	7	11	+0·6	5·7	+2·3	0	0	0	1	0	9	11	4	6	0	0	0	0	0	5	16	4	6				Kotah
5·0	−1·2	5·0	13·13	+1·62	6·05	6	9	−3·8	6·8	+2·9	0	1	0	0	0	9	18	2	1	1	2	0	0	0	6	12	10	0				Jhalawar
6·4	...	5·9	1·18	−5·83	0·32	6	6	−2·6	4·9	...	0	1	0	1	3	16	9	1	0	0	0	0	0	1	25	5	0	0				Udaipur
																																Madhya Bharat
6·5	...	6·5	7·54	...	2·28	4	12	...	4·8	...	0	1	3	1	0	5	15	4	2	3	0	4	1	1	7	10	4	1				Gwalior
6·7	+0·7	6·4	9·10	−6·35	2·57	6	13	−0·6	7·7	+1·8	0	0	1	0	0	7	20	3	0	0	0	0	0	0	16	6	9	0				Guna
6·3	+0·3	6·4	6·04	−3·11	2·84	31	5	−5·0	9·1	+1·2	0	0	0	0	0	15	15	1	0	0	0	0	0	0	15	15	1	0				Neemuch
7·4	...	7·4	4·73	...	1·93	31	11	...	7·1	...	1	0	0	0	0	11	17	2	0	0	0	0	0	0	9	19	3	0				Ratlam
6·3	−0·9	6·3	2·77	−5·38	1·62	31	4	−7·3	11·9	+2·3	0	0	0	0	0	5	24	2	0	0	0	0	0	0	5	22	4	0				Indore
6·7	+0·1	7·0	6·37	−4·57	1·86	30	8	−6·8	7·5	+2·4	0	0	0	0	0	5	15	10	1	0	0	0	0	0	6	15	9	1				Bhopal
7·1	+0·5	6·8	7·55	−3·39	3·29	30	8	−6·8	11·0	+3·9	1	0	0	0	0	5	12	12	1	4	0	0	0	0	2	14	11	0				Beiragarh
6·5	...	6·6	7·36	...	2·10	27	12	...	7·2	...	0	4	1	1	1	11	10	3	0	2	3	2	0	1	8	11	3	1				Madhosagar
																																Vindhya Pradesh
6·3	0	6·4	20·51	−7·42	3·93	14	14	+0·1	3·4	+0·9	1	2	0	0	0	20	8	0	0	3	1	3	1	1	17	2	3	0				Nowgong
5·7	−0·7	5·7	14·30	+1·10	4·40	2	18	+2·9	4·2	−0·1	0	0	2	1	5	13	6	1	3	1	1	0	0	1	18	1	2	7				Sutna
7·2	+0·2	7·5	21·31	+8·19	3·56	2	15	−1·0	4·3	+0·4	2	0	0	0	0	3	13	10	3	1	0	0	0	1	1	17	8	3				Umaria
																																Madhya Pradesh East
5·6	...	4·5	8·13	...	1·82	5	12	...	3·5	...	1	0	0	2	3	12	6	5	2	1	0	0	1	0	8	3	4	14				Gondia
6·0	+0·4	7·4	11·31	−3·01	1·60	12	16	−3·4	3·8	0	1	1	1	1	7	0	3	9	8	2	0	1	1	7	5	6	7	2				Pendra
6·8	...	7·5	20·07	...	3·20	3	20	...	6·3	...	0	0	2	2	2	7	13	1	4	2	1	0	1	0	9	10	4	4				Champa
7·5	+1·2	7·6	13·37	−0·95	2·92	26	17	+1·5	5·6	−1·8	0	0	0	0	1	12	9	1	8	2	0	0	0	0	5	13	4	7				Raipur
7·4	+0·6	7·4	13·19	+0·95	4·26	5	16	+0·8	3·8	−1·2	0	0	0	0	0	9	6	0	16	0	0	0	0	0	7	5	1	18				Kanker
6·5	+0·5	6·5	5·98	−6·62	1·58	4	10	−4·8	4·0	−0·6	0	1	0	0	0	22	0	6	2	1	3	1	2	0	5	1	12	6				Chanda
6·9	+0·8	7·4	12·52	−3·76	2·52	25	17	−1·9	5·7	+2·1	0	0	0	1	0	18	7	1	4	1	0	0	5	0	17	4	2	2				Jagdalpur
																																Madhya Pradesh West
6·1	...	6·6	4·95	...	3·75	28	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...				Buldhana
6·1	−0·1	6·4	1·45	−4·87	0·69	30	4	−5·1	8·2	+1·8	0	0	0	0	0	2	18	11	0	4	0	2	0	0	0	12	13	0				Akola
5·9	−0·3	6·6	5·68	−0·81	3·11	30	8	−1·8	8·9	+2·3	0	2	0	0	0	9	0	20	0	0	2	0	0	0	7	1	21	0				Amravati
7·8	...	7·4	3·77	...	1·16	23	8	...	9·6	...	0	0	0	2	0	13	12	4	0	1	4	0	2	0	8	1	15	0				Yeotmal
6·5	+0·7	6·9	3·54	−2·71	2·25	28	5	−4·9	9·2	+2·4	0	0	0	0	0	4	21	3	3	0	0	0	0	0	1	20	10	0				Khandwa
7·1	+0·1	6·9	10·14	−4·92	2·08	1	12	−3·7	3·2	+0·2	0	0	0	0	0	10	14	1	6	0	0	0	0	1	8	5	0	17				Hoshangabad
6·6	0	6·3	17·85	+3·78	4·15	29	13	−2·6	...	...	0	0	0	0	0	11	20	0	0	0	0	0	0	0	21	9	1	0				Sagar
6·4	−0·4	7·3	13·05	−3·93	2·19	6	17	−0·4	5·3	+2·2	0	0	0	0	1	11	14	1	4	1	0	0	0	0	11	12	3	4				Jabalpur
6·3	+0·1	7·0	9·89	−3·42	1·80	6	15	+1·5	4·2	+0·4	1	0	0	0	2	10	7	2	9	0	0	0	0	4	8	4	1	14				Seoni

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relati humidi %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Madhya Pradesh West *(Contd.)*																					
Chhindwara ...	2,248	928·3	...	925·9	82·5	...	92	26	71·2	...	69	4 days	74·4	78·9	71·1	72·1	24·7	...	24·1	85	...
Betul ...	2,144	932·4	...	929·6	81·9	...	90	24	70·5	...	67	21	73·4	78·5	70·1	72·2	23·8	...	24·4	84	...
Nagpur ...	1,010	969·3	+0·1	966·1	88·6	+1·3	97	23	75·3	+0·3	73	4 days	79·3	83·9	74·5	75·4	26·9	+1·5	26·3	79	+4
Gujarat																					
Deesa ...	466	987·6	+0·4	984·4	85·7	−3·9	91	26,27	78·1	+2·1	76	4 days	81·4	85·5	77·1	76·0	29·8	+1·3	26·3	82	−2
Surat ...	39	1004·0	+0·5	1001·4	87·1	+0·6	91	23,29,30	77·4	+0·4	75	6 days	79·9	84·4	76·3	77·4	29·3	-0·6	28·9	85	+3
Ahmedabad ...	163	998·6	+0·3	995·1	90·3	+0·4	93	7 days	76·8	0	73	24	78·8	88·5	75·3	78·0	28·4	−0·4	27·9	85	+2
Dohad ...	1,093	966·8	...	964·1	84·5	−0·8	89	25,26	73·2	−1·1	71	31	75·3	82·3	72·8	75·0	26·4	-1·5	26·4	88	−1
Baroda ...	115	1000·6	...	997·3	89·6	0	94	25	76·9	+0·3	73	23	79·4	87·2	76·1	77·7	29·3	0	28·1	86	+4
Saurashtra & Kutch																					
Bhuj ...	343	991·2	+0·3	989·4	86·3	-2·1	89	26 27,31	76·7	+0·3	75	21,22,31	79·1	83·7	74·7	75·5	27·3	−1·4	26·4	81	+2
Dwarka ...	37	1002·6	+0·3	1000·7	84·1	−0·6	85	12days	78·6	0	77	6	79·7	81·7	76·1	77·0	29·1	−0·8	29·6	84	−2
Jamnagar ...	60	1001·8	+0·5	...	86·4	-1·7	89	20	76·0	-0·7	74	5 days	80·2	...	76·2	...	29·0	−0·5	...	82	+1
Rajkot ...	432	988·6	-0·2	985·8	89·3	+0·5	94	24,25,29	74·5	-0·3	70	22	78·0	86·4	73·8	75·2	26·6	-1·5	24·8	82	−1
Veraval ...	26	1003·9	-0·1	1002·0	84·0	...	87	22,24,27	77·7	...	73	12	79·7	81·4	77·2	78·1	30·8	...	31·3	89	+3
Bhavnagar ...	55	1002·7	+0·3	999·6	90·5	−0·4	95	28	76·0	−0·6	72	23	78·8	87·4	74·7	77·3	27·5	−0·7	27·4	82	+5
Konkan																					
Dahanu ...	15	1005·1	...	1003·3	83·4	...	86	2,17	77·1	...	75	10,20,21	79·5	82·7	76·3	77·4	29·5	...	29·7	86	...
Bombay ...	35	1005·3	0	1003·3	86·2	+1·2	89	24,25,28	77·1	+1·0	75	7,11,21	80·3	82·3	76·6	77·1	29·6	0	29·4	84	+1
Alibag ...	23	1006·4	+0·5	...	84·4	+0·5	88	23	77·2	+0·2	74	21	79·7	...	77·2	...	30·8	+0·6	...	89	+5
Harnai ...	66	1004·9	...	1002·9	86·2	...	85	31	75·9	...	69	7,8	79·9	80·9	76·3	76·8	29·4	...	29·7	84	...
Devgad ...	117	1003·5	...	1001·2	83·8	...	86	4 days	77·2	...	75	20,30	78·6	82·7	76·5	78·4	30·3	...	31·3	91	...
Vengurla ...	29	1006·6	...	1004·9	84·2	...	87	22,23,25	75·6	...	73	10	78·6	80·6	76·1	77·0	29·6	...	30·1	89	...
Marmagao ...	202	1000·9	-0·6	999·0	82·4	+0·2	84	1,23	76·1	+1·1	73	10	78·5	79·7	75·8	76·0	29·2	-0·2	29·0	88	+1
Honavar ...	85	1006·4	...	1004·1	84·2	...	87	2	74·9	...	72	8	78·3	80·1	76·3	76·9	30·0	...	30·1	91	...
Deccan (Desh)																					
Jalgaon ...	660	981·6	...	979·1	92·0	...	98	23,24	74·0	...	70	18	77·7	88·9	74·0	75·8	27·0	...	24·5	84	...
Malegaon ...	1,432	956·8	+0·3	953·5	89·4	+2·1	98	23	72·5	+0·6	68	20,21	78·4	84·2	71·7	73·4	23·5	−0·9	23·2	70	−3
Deolali ...	1,874	942·2	...	...	82·0	...	92	23	70·2	...	67	20,21	73·4	...	70·2	...	24·0	...	...	85	...
Ahmednagar ...	2,154	933·6	0	930·7	87·5	+2·2	97	23	70·1	+1·1	65	15,20	74·7	82·0	69·5	70·7	22·6	−0·2	21·0	76	−2
Poona ...	1,834	944·1	−0·3	942·0	84·3	+2·6	95	23	71·1	+0·6	68	20,21	74·7	78·9	70·4	71·8	23·6	+0·3	23·8	80	−1
Sholapur ...	1,570	953·2	−0·1	949·4	91·8	+3·0	99	24	72·3	+1·2	70	5 days	77·7	86·8	70·9	72·2	23·0	−0·2	21·0	71	−4
Miraj ...	1,817	945·3	-0·7	942·8	84·0	+1·9	92	24,25	69·9	-0·1	68	18,19,20	72·8	80·0	70·6	72·0	24·7	+0·6	23·5	90	+5
Kolhapur ...	1,885	943·4	...	941·1	81·1	...	90	25	69·5	...	67	20	72·6	77·0	70·1	71·9	24·1	...	24·7	88	...
Bijapur ...	1,950	940·4	-0·8	937·5	87·3	+0·5	95	24,25	68·7	-1·3	64	16	74·4	84·7	70·6	73·9	24·1	+1·2	24·2	83	+6
Belgaum ...	2,562	921·9	−0·2	920·1	77·4	+0·9	87	24	67·3	+0·6	65	4 days	69·2	73·3	68·1	70·3	23·1	+0·2	2·1	93	+1
Gadag ...	2,131	935·7	-0·2	933·1	85·0	+1·3	91	23,25	69·5	0	67	18,20	74·1	79·3	70·1	71·2	23·3	0	22·5	82	−2
Hyderabad, North																					
Aurangabad ...	1,905	941·7	−0·1	938·4	87·5	+2·7	97	23	70·8	+1·2	68	17,19	74·4	84·5	70·6	72·5	24·1	+0·5	22·4	83	0
Parbhani ...	1,350	958·4	...	954·5	90·9	...	98	23	72·7	...	69	15,18	77·7	87·4	71·7	73·3	23·8	...	21·7	74	...
Ramagundam ...	527	986·3	...	983·1	92·2	..	96	21	78·5	...	73	6	83·1	88·1	75·8	76·3	27·1	...	25·6	72	...
Nizamabad ...	1,250	962·0	−0·8	958·1	90·3	+3·5	96	24	74·1	+1·1	70	3,30	77·3	87·9	72·0	75·5	24·4	−0·6	24·5	77	−2
Bidar ...	2,178	932·5	...	928·9	87·3	+3·2	95	18	70·8	+0·8	68	6	74·5	84·1	69·7	71·4	22·9	−0·4	21·1	79	−4

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																			STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.									
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Madhya Pradesh West *(Contd.)*
6	...	5·9	5·28	...	1·03	29	11	...	5·7	...	2	0	0	0	0	2	20	5	2	1	0	0	0	0	1	14	12	3	Chhindwara
7	...	7·6	2·66	...	0·99	6	7	...	5·1	...	0	0	0	0	0	7	16	8	0	1	1	0	0	0	2	20	7	0	Betul
4	+0·1	7·2	7·76	−3·66	3·14	30	10	−3·3	3·1	...	2	0	0	0	0	5	16	4	4	1	1	0	1	2	4	12	7	3	Nagpur
																													Gujarat
6	−1·1	4·3	2·09	−5·84	0·88	4	8	−1·1	14·0	+5·6	0	0	0	0	3	17	11	0	0	0	0	0	0	0	23	8	0	0	Deesa
1	+0·2	5·9	2·10	−5·35	0·39	5	8	−4·4	7·6	+1·7	0	0	0	0	0	15	13	3	0	0	0	0	0	0	31	0	0	0	Surat
7	+0·3	6·0	2·42	−5·63	0·72	9	6	−5·0	4·5	+0·3	1	0	0	0	2	14	11	3	0	0	0	0	1	3	13	11	2	1	Ahmedabad
9	−0·4	5·2	2·56	−4·41	0·79	31	7	−3·7	15·8	+7·9	0	0	0	0	0	15	16	0	0	0	0	0	0	0	24	7	0	0	Dohad
5	−0·1	5·3	1·86	−7·16	1·09	2	4	−5·7	4·7	−0·2	0	0	0	0	2	17	6	2	4	0	0	0	0	6	16	4	1	4	Baroda
																													Saurashtra & Kutch
7	+0·7	5·8	0·97	−1·96	0·72	8	2	−1·7	10·7	+0·4	0	0	0	0	0	19	10	1	1	0	0	0	0	0	19	11	1	0	Bhuj
0	+0·2	5·7	0·50	−2·08	0·19	8	2	−1·8	15·1	+2·5	0	0	0	0	0	11	19	1	0	0	0	0	0	0	12	19	0	0	Dwarka
6	+1·7	...	1·75	−2·10	1·70	9	7	+1·8	10·3	−2·7	0	0	0	0	0	15	16	0	0	...	...	...	...	...	..	...	...	...	Jamnagar
5	−1·0	6·0	1·02	−4·08	0·36	9	5	−2·0	13·8	+3·6	0	0	0	0	0	18	13	0	0	0	0	0	0	0	13	13	5	0	Rajkot
7	0	5·7	1·65	−1·96	0·26	3	6	+0·1	16·9	...	0	0	0	0	0	10	18	2	1	0	0	0	0	0	6	21	4	0	Veraval
4	−0·9	5·8	0·70	−4·63	0·34	8	2	−5·3	7·3	+1·0	0	0	0	0	6	11	12	1	1	0	0	0	3	11	9	9	0	0	Bhavnagar
																													Konkan
2	...	6·5	4·62	...	0·96	10	12	...	13·8	...	0	0	5	5	0	10	11	0	0	0	0	0	0	0	11	18	2	0	Dahanu
2	−0·8	6·2	3·39	−10·00	0·67	7	10	−9·0	7·5	−2·2	2	1	3	1	1	10	12	1	0	2	0	0	0	0	9	11	9	0	Bombay
9	−0·4	...	3·59	−12·85	0·52	4	12	−9·1	12·8	−1·9	2	1	0	2	2	13	7	1	3	...	...	...	...	...	...	...	...	...	Alibag
7	..	5·7	6·51	...	1·38	9	11	...	11·4	...	4	1	2	1	4	10	8	1	0	0	0	0	0	4	12	10	5	0	Harnai
1	...	6·0	5·63	...	0·87	8	15	...	13·3	...	1	1	5	2	0	2	17	3	0	0	0	0	0	0	2	21	8	0	Devgad
3	...	7·1	18·18	...	6·92	7	16	...	...	...	0	1	0	0	0	1	12	0	17	0	0	0	0	0	1	19	1	10	Vengurla
3	−1·2	5·7	9·59	−7·52	3·06	7	13	−8·2	9·5	+1·3	1	4	4	0	0	5	11	6	0	0	0	0	0	1	7	17	6	0	Marmagao
3	...	6·6	16·22	−9·42	3·79	8	21	−4·3	3·0	...	0	0	6	2	0	3	10	1	9	0	0	1	0	0	2	11	8	9	Honavar
																													Deccan (Desh)
4	...	5·2	1·83	−4·53	0·65	28	4	−7·3	7·7	...	0	0	0	0	0	3	19	9	0	2	0	0	0	0	0	11	18	0	Jalgaon
0	−0·8	6·0	0·31	−2·73	0·29	28	1	−4·3	6·8	−1·1	0	0	0	0	0	0	22	1	8	0	2	0	0	0	0	22	5	2	Malegaon
6	...	...	1·42	...	0·22	9, 10	4	...	9·9	...	0	0	0	0	0	4	24	1	2	...	...	...	...	...	...	...	...	...	Deolali
7	+0·3	7·3	1·30	−1·42	0·54	25, 28	3	−1·6	7·1	−1·7	5	0	0	1	0	9	7	7	2	3	0	0	0	0	10	12	5	1	Ahmednagar
0	−0·4	6·7	1·16	−2·39	0·51	9	2	−6·3	4·3	−4·6	0	0	0	0	0	0	25	1	5	0	0	0	0	0	0	27	1	3	Poona
2	−0·2	6·6	2·72	−1·56	0·88	28	8	−1·0	8·2	−0·5	6	0	0	0	0	19	4	1	1	3	1	1	1	0	15	3	5	2	Sholapur
4	−1·7	5·6	4·95	+0·24	1·75	27	9	−0·2	9·1	−0·1	0	0	0	0	0	9	14	6	2	0	0	0	0	0	5	15	11	0	Miraj
5	...	5·9	5·73	...	1·17	7	11	...	10·5	...	0	0	0	0	0	1	27	0	3	0	0	0	0	0	1	28	2	0	Kolhapur
6	+1·0	7·7	5·16	+2·76	1·86	25	6	+2·3	8·5	−0·3	2	1	0	0	0	7	12	8	1	1	1	0	2	0	6	12	8	1	Bijapur
9	−0·2	6·8	11·96	+2·32	1·81	10	20	+2·4	5·5	+0·2	0	1	0	7	10	7	6	0	0	2	0	1	1	11	2	14	0	0	Belgaum
3	+1·4	6·7	4·76	+0·68	2·46	23	5	−3·3	10·5	+0·2	1	1	1	1	0	9	14	4	0	0	0	0	0	1	0	11	13	3	3	Gadag
																													Hyderabad, North
6	−0·4	6·9	4·72	−0·07	4·11	28	4	−4·9	10·5	+0·4	0	1	0	0	0	9	16	4	1	2	0	0	1	0	5	13	10	0	Aurangabad
4	...	6·3	4·36	−1·45	1·87	25	6	−3·0	...	...	0	0	1	0	0	0	27	0	3	0	0	0	0	0	0	27	0	4	Parbhani
6	...	5·3	4·13	...	1·45	27	7	...	3·7	...	4	3	0	7	12	1	2	2	0	8	1	1	2	3	3	7	4	0	Ramagundam
5	+0·4	5·9	6·14	−3·62	2·64	30	7	−6·8	4·6	−0·2	0	0	0	0	2	9	12	2	6	2	0	0	0	0	8	14	1	6	Nizamabad
6	+0·2	6·5	3·46	−2·72	1·21	30	7	−3·4	11·7	+0·7	2	0	1	1	0	14	9	4	0	2	3	2	0	0	6	14	4	0	Bidar

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relat humic %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Hyderabad, South																					
Gulbarga ...	1,503	955·3	−0·3	951·1	90·7	+1·9	98	25	72·5	+1·0	70	4 days	76·7	87·3	71·5	72·8	24·2	+0·5	21·6	79	+1
Raichur ...	1,311	962·3	−0·2	958·1	92·1	+2·2	96	24	73·5	+0·9	71	26,31	77·3	87·9	71·8	73·3	24·2	0	21·4	76	0
Hyderabad (Begumpet) ...	1,778	945·7	+0·1	942·3	88·9	+3·0	97	24	73·2	+1·2	71	25,27	76·6	85·2	71·7	74·0	24·6	−0·2	24·1	79	+1
Hanamkonda ...	881	975·0	−0·2	971·5	90·3	+3·6	95	21,25,26	76·5	+1·4	72	30	80·6	88·0	73·7	75·6	25·2	−0·6	24·6	71	−4
Khammameth ...	367	992·7	...	988·8	92·8	...	97	21,26	77·6	...	73	30	82·2	90·5	76·1	78·0	28·3	...	27·7	74	...
Coastal Andhradesa																					
Nellore ...	66	1003·7	−0·4	999·8	96·7	+0·7	101	5 days	80·0	+0·6	76	2	85·7	91·9	76·1	77·9	26·4	−0·1	26·3	63	−2
Ongole ...	38	1004·1	...	1000·5	96·5	...	101	18,19,20	79·9	...	73	27	85·6	92·3	76·7	77·7	27·3	...	25·8	66	..
Masulipatam ...	10	1005·0	−0·1	1001·3	92·5	+1·2	96	15,16,19	79·9	+2·0	76	2·27,29	83·4	88·4	77·3	79·4	29·2	−0·7	30·2	76	−3
Kakinada ...	26	1003·9	+0·2	1000·6	91·6	+1·9	97	18	79·1	+0·8	74	9	83·5	88·0	78·2	79·8	30·5	+0·2	31·0	79	−1
Visakhapatnam ...	126	999·6	+0·3	996·5	89·6	+0·5	97	2	79·6	+1·0	73	31	83·6	86·1	77·4	77·6	29·3	−0·2	28·4	75	−2
Calingapatam ...	19	1002·8	+0·4	1000·0	89·0	−1·0	92	20,25	78·5	−0·1	74	29	82·0	84·3	78·3	79·4	31·4	−0·2	32·1	84	+3
Rentachintala ...	348	993·8	...	989·5	96·9	+4·0	103	20	78·5	+0·1	72	29,30,31	83·6	93·0	74·9	76·1	25·6	−0·3	23·1	65	−3
Rayalaseema																					
Cuddapah ...	428	992·7	−0·1	987·9	95·0	+0·3	101	25	78·3	+0·8	73	30	83·6	91·7	76·1	79·1	27·4	+1·5	28·2	70	+1
Bellary ...	1,473	956·9	−0·6	953·5	90·1	−0·4	95	21,24	74·5	+0·6	70	25	77·6	86·8	71·1	72·6	23·0	+0·8	20·9	71	+
Kurnool ...	923	975·3	−0·3	970·7	91·9	+1·4	98	24	73·8	−0·5	71	24,26	78·9	88·5	72·6	74·3	24·5	−0·1	22·5	73	−
Anantapur ...	1,147	967·8	...	963·7	92·4	...	96	1·21,24	74·0	...	71	24,25	78·3	88·6	72·1	74·0	24·1	...	22·0	73	..
Tamilnad																					
Pamban ...	37	1006·7	−0·5	1003·5	87·1	−2·0	91	13,17	78·9	+0·1	75	20,21	82·2	82·2	77·3	77·1	29·8	+0·1	29·5	79	+
Mathurai ...	437	992·8	−0·6	989·1	95·2	0	100	12,13,14	76·3	−0·2	71	31	83·2	85·9	74·6	76·4	25·4	+1·4	26·8	66	+
Nagapattinam ...	31	1006·6	−0·6	1002·9	93·1	−1·0	99	12	78·6	+0·9	74	20,21	82·9	86·6	75·8	78·8	27·2	−0·1	30·1	71	+
Tiruchi ..	295	997·7	−0·8	993·5	94·3	−2·1	100	16	76·8	−0·4	71	29	81·7	89·9	74·6	76·5	26·1	+1·0	25·1	71	+
Coimbatore ...	1,341	962·6	−0·7	959·5	86·3	−1·1	90	16	71·9	+0·9	69	22	75·2	81·1	71·4	72·3	24·6	−0·4	23·1	81	
Salem ...	913	976·7	−0·7	972·4	91·3	−1·0	97	18	74·0	+0·8	69	1	77·1	87·1	73·2	76·0	26·1	+0·2	26·6	82	+
Kallakurichi ...	416	992·7	...	988·6	94·8	...	101	15	75·8	...	71	29	81·0	89·5	74·3	75·7	25·9	...	24·1	72	.
Cuddalore ...	39	1005·8	−0·6	1001·9	93·5	−0·7	99	12	77·6	+0·6	72	31	82·8	87·0	75·8	78·8	27·3	−1·2	29·9	72	-
Vellore ...	703	983·0	−0·1	978·9	94·2	+1·0	100	16	77·2	+0·8	73	22	81·5	88·7	73·4	75·3	24·5	−1·0	23·8	67	-
Madras ...	51	1005·0	−0·3	1001·2	93·0	−1·8	97	4 days	77·7	−0·3	73	28	83·0	86·2	75·6	77·7	26·9	+0·6	28·5	70	-
Arogyavaram ...	2,299	930·3	...	927·1	86·3	...	92	16	70·8	...	67	1	74·9	83·0	69·5	71·4	22·4	...	21·6	75	
Malabar And South Kanara																					
Mangalore ...	72	1006·6	−0·8	1004·4	83·7	−0·2	86	3,5,30	74·6	+0·4	73	7 days	77·5	80·7	75·6	77·0	29·4	+0·1	30·0	91	
Kozhikode ...	27	1008·4	−0·9	1006·1	84·2	+1·3	87	17	74·3	0	69	11	76·5	80·6	75·4	78·0	29·6	+0·8	31·6	95	
Palghat ...	319	998·4	...	995·5	83·7	...	88	25	73·5	...	71	4 days	76·3	74·5	74·1	75·3	27·8	...	28·0	90	
Mysore																					
Chitaldrug ...	2,405	926·6	−0·8	923·9	83·1	+0·5	88	25	69·0	+0·5	67	17,19	71·3	80·0	68·3	70·3	23·4	+0·2	21·4	85	
Hassan ...	3,149	903·8	...	901·4	77·8	−0·9	83	25	65·6	+0·3	63	17,18	67·7	74·7	66·1	68·8	21·3	0	21·8	92	
Bangalore ...	3,021	907·7	−0·4	904·7	81·6	+0·2	85	14,16,20	66·5	+0·9	65	4 days	69·6	78·7	66·8	68·8	21·3	0	20·0	86	
Mysore ...	2,518	924·3	−0·7	921·7	82·3	−0·7	87	20	67·0	+0·2	65	5 days	71·0	77·9	68·2	70·5	22·4	+0·7	21·7	87	

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Hyderabad, South
5·6	+0·1	6·4	5·89	+0·22	2·34	25	7	−0·7	11·2	+2·1	1	1	1	0	1	6	17	4	0	1	2	2	0	1	4	16	5	0	Gulbarga
5·2	+0·9	6·0	5·83	+1·44	1·43	1	8	+0·2	11·2	+1·6	0	0	1	2	0	6	16	6	0	0	1	2	1	0	4	13	10	0	Raichur
6·1	0	6·2	7·19	+1·90	1·47	1	9	−0·9	10·1	+1·5	1	0	2	1	0	1	30	5	1	2	1	3	0	1	2	18	3	1	Hyderabad (Begumpet)
5·1	−0·7	5·6	4·13	−2·85	1·79	30	6	−4·7	6·4	−0·4	2	1	0	1	3	2	15	7	0	3	3	1	1	2	1	12	8	0	Hanamkonda
5·7	...	5·7	7·08	...	4·22	30	9	...	5·0	...	1	0	2	1	5	1	19	2	0	6	0	5	0	1	0	15	4	0	Khammamett
																													Coastal Andhradesa
5·1	−0·9	5·8	1·92	−1·10	0·82	22	5	−0·5	4·6	−0·9	0	0	0	0	0	0	15	4	12	0	0	5	2	2	0	7	2	13	Nellore
5·1	...	5·4	2·11	...	0·87	26	6	...	8·2	...	0	0	2	0	2	5	15	2	5	1	0	2	0	4	2	31	0	1	Ongole
5·5	−0·3	6·0	2·74	−3·52	1·29	27	4	−6·2	7·5	+1·5	0	0	1	2	1	3	18	2	4	3	0	0	6	4	6	7	4	1	Masulipatam
4·3	−1·6	4·1	5·43	−0·13	2·03	30	9	−0·6	6·7 (k)	+1·3	0	0	0	5	0	24	1	1	0	0	0	1	3	1	25	0	1	0	Kakinada
5·5	−1·0	5·3	1·53	−3·63	0·63	31	4	−4·2	5·2	+0·6	0	0	0	1	4	5	17	3	1	0	0	1	1	7	12	8	1	1	Visakhapatnam
6·3	+1·1	6·5	5·98	−0·82	2·70	9	12	+2·5	6·9	+0·8	0	0	0	0	0	11	14	6	0	0	0	0	1	10	14	6	0	0	Calingapatam
6·9	+0·2	6·4	5·72	+2·18	2·15	20	6	−1·8	7·8	−0·8	0	0	0	1	2	3	17	3	5	1	1	4	1	1	0	23	0	0	Rentachintala
																													Rayalaseema
5·0	−0·9	6·3	3·86	−1·38	1·20	30	10	+2·3	3·3	−3·3	0	0	0	0	0	0	18	0	13	1	0	2	0	1	0	21	0	6	Cuddapah
6·7	+1·1	6·4	6·82	+4·44	4·16	25	5	+1·0	8·1	+0·2	0	0	0	0	1	0	25	0	5	0	0	2	0	0	1	27	1	0	Bellary
4·3	−1·6	5·3	6·88	+2·38	2·64	1	8	−0·6	9·1	−0·1	0	0	0	0	1	2	19	8	1	0	2	1	1	1	3	7	17	0	Kurnool
5·1	...	5·8	2·42	−0·88	1·00	25	6	+1·2	10·9	...	0	0	1	0	0	2	24	1	3	0	0	0	2	2	6	18	3	0	Anantapur
																													Tamilnad
4·2	+1·3	5·8	1·25	+0·66	0·94	21	2	+1·0	10·1	+2·0	1	0	0	6	10	12	2	0	0	0	0	0	0	7	19	4	1	0	Pamban
5·7	+0·5	6·8	10·90	+6·82	3·44	23	13	+7·0	3·5	−0·3	3	0	2	1	0	0	13	11	1	2	2	1	4	2	3	7	3	7	Mathurai
7·0	+2·4	5·7	6·14	+3·09	3·76	20	3	−1·9	6·3	+1·1	0	0	0	1	1	13	14	2	0	0	1	0	10	10	8	1	0	1	Nagapattinam
6·5	+1·9	6·7	8·01	+4·18	2·28	21	13	+8·3	12·7 (i)	−2·5	0	0	0	0	2	0	22	7	0	1	1	1	0	5	4	11	8	0	Tiruchi
5·3	+1·0	5·9	2·26	+1·03	1·40	21	4	+0·9	9·4	+4·0	1	0	0	0	14	15	1	0	0	0	0	0	0	12	16	3	0	0	Coimbatore
5·7	+0·5	6·9	8·01	+1·44	1·81	1	11	+1·1	4·5	+0·8	1	0	0	0	5	14	9	0	2	1	2	2	0	3	4	11	2	6	Salem
5·2	...	6·2	4·17	...	1·08	26	7	...	...	...	0	2	0	2	3	8	0	0	16	0	2	0	5	0	13	0	2	9	Kallakurichi
6·5	+1·5	6·0	4·08	−0·72	1·29	31	7	−0·1	6·5	+2·3	1	0	0	0	0	20	9	1	0	0	0	2	22	5	0	2	0	0	Cuddalore
5·5	+1·0	6·5	5·39	−0·35	1·84	22	9	+1·6	5·0	+1·0	0	0	0	0	0	2	17	5	7	4	3	0	0	2	7	8	6	1	Vellore
5·4	0	6·2	8·30	+3·72	3·61	28	10	+2·1	8·8	−0·9	0	0	0	0	3	10	13	3	2	1	1	5	15	6	1	2	0	0	Madras
6·5	...	7·1	3·20	...	0·92	27	9	...	6·1	...	1	0	0	0	0	3	18	4	5	2	1	1	1	1	1	9	11	4	Arogyavaram
																													Malabar And South Kanara
7·5	+0·8	7·2	12·34	−11·18	2·77	8	17	−8·1	4·7	+0·2	3	1	8	3	1	2	11	1	1	1	0	0	0	2	9	8	10	1	Mangalore
7·1	+0·5	7·2	14·26	−2·90	2·80	8	19	−0·3	5·6	+1·1	2	4	5	2	0	1	8	9	0	2	2	0	0	2	4	11	10	0	Kozhikode
6·3	...	6·6	7·11	...	1·22	21	15	...	6·3	...	0	0	0	0	0	3	27	1	0	0	0	0	0	0	5	26	0	0	Palghat
																													Mysore
6·5	−0·4	6·4	4·78	+1·40	2·02	21	10	+2·6	8·1	+0·7	0	0	0	0	0	8	21	1	1	0	0	2	0	0	6	22	1	0	Chitaldrug
7·3	+0·7	7·7	3·43	−0·47	1·15	23	6	−3·2	8·5	+2·3	0	1	0	0	0	5	23	1	1	0	0	1	1	0	7	19	3	0	Hassan
6·9	−0·3	6·7	5·21	+0·23	1·36	23	10	+0·7	9·2	+1·9	0	0	0	0	0	5	20	2	4	1	0	1	0	0	7	15	6	1	Bangalore
6·5	+0·2	6·6	3·99	+0·70	1·43	21	9	+2·0	6·6	−1·1	0	1	0	0	1	13	16	0	0	1	0	0	1	0	4	24	0	1	Mysore

(k) Mean of 20 days

(i) Mean of 22 days

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relat humid %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Travancore–Cochin																					
Fort Cochin ...	10	1009·5	-0·9	1007·0	82·6	+0·2	85	7,30,31	74·8	-0·2	72	17	78·2	79·3	75·6	76·2	29·1	+0·6	29·5	89	+3
Alleppey ...	12	1009·5	...	1007·0	84·1	...	87	12	74·1	...	71	16	77·9	80·6	76·0	76·7	29·8	...	29·6	92	...
Trivandrum ...	211	1002·6	-1·1	1000·3	83·4	...	87	12	73·7	...	72	8,16	76·4	80·1	74·4	75·4	28·2	+0·4	27·9	91	+5
Nagercoil ...	195	1002·5	...	999·9	86·7	...	91	18,20	75·1	...	71	24	78·6	81·2	74·5	75·0	27·3	...	26·8	82	...
Hill Stations Excluding Kashmir																					
Aijal ...	3,599	884·3	...	883·0	71·9	...	75	6 days	66·3	...	65	6 days	68·9	68·9	67·9	68·1	22·9	...	22·9	94	...
Shillong ...	4,921	845·3	-0·6	843·0	73·4	-1·7	81	27	63·8	-0·2	61	26	68·2	69·0	66·0	65·8	21·2	+0·6	20·6	89	+8
Cherrapunji ...	4,309	864·8	+0·2	862·4	69·5	-3·0	76	9	63·8	-1·5	61	1.24	66·2	67·0	65·9	66·3	21·4	-0·5	22·0	99	+10
Darjiling ...	7,432	772·9	-0·9	770·9	64·6	-1·0	71	9	57·2	-0·5	54	3	60·8	60·2	60·4	60·0	17·7	-0·1	17·8	98	+6
Kalimpong ...	3,965	875·2	+0·7	872·3	73·7	-1·8	80	8	66·4	-0·8	64	11	68·9	70·1	68·2	69·0	23·8	0	24·7	96	+5
Katmandu ...	4,388	861·6	...	859·2	82·1	-1·3	87	7	67·6	-0·7	65	9,23	73·0	74·8	69·4	70·7	23·2	0	24·1	83	+2
Muktesar ...	7,592	768·0	-1·3	766·3	67·5	-0·5	74	7	57·5	+0·1	53	31	60·4	62·6	59·6	61·6	17·3	+0·4	18·3	96	+5
Mussooree ...	6,699	792·1	...	790·3	66·7	-1·5	74	7	59·8	-0·1	58	19.23	62·5	63·9	62·1	63·6	18·9	+0·1	19·8	95	0
Simla ...	7,224	777·4	-1·0	776·1	67·4	-1·0	75	7	59·0	-0·2	57	19,20,24	62·1	64·4	60·5	62·6	17·5	+0·4	18·8	92	+6
Abu ...	3,945	873·8	-0·3	872·4	71·6	-0·4	77	25	64·1	-0·3	61	20	65·4	70·6	64·6	67·7	20·5	-0·3	22·0	96	+3
Pachmarhi ...	3,528	888·1	+0·5	885·9	75·0	+0·2	83	24,27	66·8	-0·1	65	6 days	68·8	73·0	66·9	69·1	21·6	-0·7	22·4	92	+2
Mahabaleshwar ...	4,534	859·1	-0·4	858·0	67·3	+1·7	80	25	61·2	-0·3	59	19,20	63·0	64·2	62·6	64·0	19·2	-0·4	20·3	97	0
Mercara ...	3,781	883·1	-1·2	882·2	70·5	+1·3	75	6 days	62·8	+0·8	61	25	64·8	67·1	64·2	65·8	20·3	+0·7	21·2	97	+2
Kodaikanal ...	7,688	769·9	+0·2	768·2	63·2	+0·5	66	5 days	52·9	+1·0	50	11	56·9	57·0	53·6	55·2	12·9	+0·3	14·3	82	+5
Ootacamund ...	7,364	778·2	-0·4	776·5	63·9	+1·1	68	29	51·4	-0·3	48	10,25	56·3	58·3	54·3	56·4	14·1	+0·9	14·8	89	+2
Coonoor ...	5,730	824·4	...	...	70·4	-0·5	74	14	58·1	+0·3	51	21	66·0	...	60·0	...	15·5	+0·7	...	71	+2
Tibet																					
Lhasa ...	12,090	...	...	...	71·7	...	78	1	47·0	...	43	5,28,29	56·2	...	54·7	...	14·0	...	...	94	...
Gyantse ...	13,110	625·6	...	...	68·4	+0·2	75	1,2	44·1	-0·1	39	26	55·1	...	47·7	...	8·9	-0·7	...	63	-6
Ceylon																					
Colombo ...	24	1009·3	-0·6	1006·8	84·9	-0·7	87	26	77·5	+0·5	72	29	80·3	81·4	76·3	76·4	29·1	0	28·8	83	-1
Trincomalee ...	24	1007·3	+0·1	1004·2	92·1	-0·5	98	14	77·2	+0·2	72	22	81·0	85·5	75·5	77·5	27·7	+0·5	28·6	76	+3
Hambantota ...	61	1007·0	-0·6	1004·3	87·4	+0·6	94	17	76·6	+0·5	73	29	80·0	82·2	75·5	75·7	28·1	-0·2	27·4	81	-4
Mannar ...	12	1008·1	...	1005·2	86·3	...	89	14,15,16	78·3	...	74	20	80·8	82·0	76·8	77·5	29·7	...	30·2	83	...

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Travancore-Cochin
·4	+1·4	7·4	14·57	+0·68	1·74	27	26	+7·3	5·8	+0·8	1	5	8	6	0	5	1	4	1	2	0	0	2	2	2	12	10	1	Fort Cochin
·8	...	6·8	18·86	...	2·95	...	23	...	6·4	...	1	7	7	4	2	1	4	5	0	1	0	1	1	0	4	8	16	0	Alleppey
·4	+0·1	5·9	10·83	+6·10	2·42	25	13	+3·2	5·9	−0·7	9	3	1	1	0	1	0	16	0	2	0	0	0	1	3	6	19	0	Trivandrum
·9	...	7·2	4·07	...	1·95	25	7	...	9·2	...	0	0	0	0	0	0	12	19	0	0	0	0	0	0	2	17	12	0	Nagercoil
																													Hill Stations Excluding Kashmir
·2	...	5·8	10·08	...	1·45	29	22	...	4·3	...	0	2	1	9	10	9	0	0	0	0	0	0	7	8	16	0	0	0	Aijal
·7	+1·1	7·6	20·78	+8·29	4·03	28	26	+7·5	1·7	0	0	0	0	1	3	3	0	0	24	0	0	0	0	4	4	1	0	22	Shillong
·9	+0·8	7·3	98·35	+28·27	8·84	1	28	+1·8	7·1	+2·5	0	7	7	4	8	4	1	0	0	0	6	1	2	5	12	3	0	2	Cherrapunji
·7	+0·7	7·8	32·43	+5·87	4·26	16	29	+5·3	5·1	+1·7	0	0	16	8	0	0	2	0	5	0	0	10	8	1	2	5	0	6	Darjiling
·1	+0·6	7·3	32·04	+12·16	5·58	12	25	+3·5	4·4	−0·9	0	0	0	2	0	0	0	5	24	0	0	0	30	0	0	0	0	1	Kalimpong
·1	+0·4	7·3	17·09	+3·41	2·50	15	22	+1·2	6·8	−0·1	0	0	7	4	1	0	0	0	19	3	0	0	1	2	1	0	2	22	Katmandu
·9	+0·3	7·2	11·54	−0·72	2·70	2	18	+0·1	...	...	0	3	4	1	0	5	6	2	10	0	0	1	0	1	8	13	4	4	Muktesar
·7	+0·7	7·0	47·95	+20·61	7·77	23	26	+2·2	1·3	−2·3	0	1	0	2	3	2	0	0	23	3	2	0	3	5	2	0	1	15	Mussooree
·2	−0·4	6·5	15·43	−1·42	1·83	16	21	+1·3	1·3	−0·9	2	1	1	1	3	2	0	0	21	2	0	0	0	3	2	3	2	19	Simla
·2	−0·1	5·8	11·36	−11·39	1·60	10	12	−5·4	...	...	0	0	0	0	4	17	5	0	5	0	0	0	6	13	6	0	0	6	Abu
·7	−0·6	6·8	17·80	−6·02	3·53	6	17	−4·9	5·5	−0·9	1	0	0	0	0	1	22	6	1	0	1	0	0	0	3	24	3	0	Pachmarhi
·6	−0·2	7·9	27·94	−45·17	4·68	10	23	−6·8	9·2	−0·6	1	2	2	0	0	20	4	2	0	0	0	0	0	0	23	1	7	0	Mahabaleshwar
·0	−0·4	7·3	19·83	−6·97	2·78	8	23	−3·5	7·9	+1·5	0	1	1	0	4	4	11	10	6	0	1	0	0	4	5	11	10	0	Mercara
·5	+0·4	7·6	11·82	+4·82	2·44	21	19	+6·9	8·0	−0·6	0	1	0	1	2	2	8	13	4	2	2	0	1	5	0	7	10	4	Kodaikanal
·6	−1·0	6·4	11·60	+5·91	2·03	31	16	+3·7	4·9	−0·4	0	0	0	0	0	0	11	1	19	0	0	0	0	1	1	12	1	16	Ootacamund
·2	+0·7	...	6·42	+1·43	2·05	21	11	+1·9	3·8	−0·2	6	1	0	8	10	0	1	5	0	...	...	...	...	...	...	...	...	...	Coonoor
																													Tibet
1·4	...	...	5·96	...	0·96	5	15	...	0·2	...	...	...	...	...	...	...	...	...	31	...	...	...	...	...	...	...	...	...	Lhasa
4·4	−2·1	...	5·59	+1·77	0·99	14	11	+1·2	1·7	−0·5	1	0	0	0	1	1	1	3	24	...	...	...	...	...	...	...	...	...	Gyantse
																													Ceylon
7·1	+1·2	7·2	3·68	−0·02	1·78	29	5	−1·9	...	...	0	0	0	1	2	18	7	1	2	0	0	0	0	3	17	11	0	0	Colombo
6·6	+2·6	7·0	6·03	+2·18	4·21	22	6	+1·2	..	..	0	0	0	0	1	29	1	0	0	2	4	0	2	1	18	2	1	1	Trincomalee
6·7	+2·9	6·9	1·17	−0·46	0·38	29	3	−0·9	...	...	0	0	0	0	0	12	19	0	0	0	0	0	0	0	14	17	0	0	Hambantota
7·5	...	7·4	0·36	...	0·28	20	1	...	...	...	0	2	0	0	3	15	0	0	1	0	0	0	0	12	19	0	0	0	Mannar

TABLE III.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 4TH CLASS STATIONS— AUGUST 1950

STATION	Maximum temperature, °F				Minimum temperature, °F				Mean dry bulb temperature 0830 hrs. I.S.T. °F	Mean wet bulb temperature 0830 hrs. I.S.T. °F	Vapour pressure millibars		Relative humidity %		Mean cloud amount, 0830 hrs. I.S.T.	Rainfall, inches				Number of rainy days (0·10" or more)		Wi
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 0830 hrs. I S.T.	Departure from normal	Mean 0830 hrs. I.S.T.	Departure from normal		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Resultant direction 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Assam																						
Lumding ...	90·5	+0·3	95	4,25, 26	...	...	...	...	82·9	79·6	32·7	+1·6	87	+4	...	10·65	+2·57	1·82	6	15	+3·7	...
Jammu and Kashmir																						
Jammu ...	90·8	−1·0	95	7,8,27	76·6	−1·1	73	2,17,30	79·5	76·4	29·3	+0·2	87	+8	5·7	8·24	−3·51	1·00	28,29	19	+7·9	...
Kargil (R) ...																						
Mysore																						
Balehonnur ...	75·1	+1·1	81	24,25	65·2	−0·2	63	4days	68·2	67·1	22·3	+0·3	94	0	...	20·11	−3·29	3·21	8	22	−2·5	...
Sikkim ...																						
Lachen ...	..	...	...	...	41·6	...	40	8,15,19	58·5	...	...	...	...	...	...	11·23	...	0·99	19	26	...	...
Tibet																						
Yatung (Chumbi)	64·8	+0·1	69	4days	51·4	+1·1	47	2,30,31	59·0	56·1	14·4	+0·4	82	−4	5·5	4·95	−1·16	0·37	21	20	+2·6	...

(R) Register not received

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 5TH CLASS STATIONS— AUGUST 1950

Division	Station	Rainfall, inches				Number of rainy days (0.10" or more)		Division	Station	Rainfall, inches				Numl rainy (0.10"
		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal			Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Assam ...	Mawsynram ...	84·90	...	7·50	14	27	...	Jammu & Kashmir	Sonamarg ...	2·75	−0·87	0·40	23	12
West Bengal ...	Bankura ...	11·57	−0·56	3·65	11	15	−1·0		Gurez ...	3·15	−0·23	1·04	30	6
Bihar ...	Muzaffarpur ...	9·09	−3·47	3·65	16	+6·11	−2·6	Deccan (Desh) ...	Khandala ...	20·40	−29·30	2·95	9	24
	Chapra ...	11·18	−0·10	2·97	2	13	−0·4	Tamilnad ...	Palayamcottai ...	0	−0·66	0	...	0
	Arrah ...	9·53	−3·04	2·23	15	14	−0·6	Sikkim ...	Thangu ...	5·00	...	0·51	23	22
Punjab (I) ...	Dalhousie ...	21·05	−1·10	3·64	2	25	+3·5		Lachung ..	7·91	−1·41	0·80	29	25
	Kyelang ...	0·65	−0·74	0·28	4	3	−0·8		Chungthang ...	16·18	...	1·66	26	24
	Gondla ...	1·01	...	0·21	31	5	...							
	Koksar ...	1·77	...	0·60	31	6	...							
	Kothi ..	13·13	...	1·06	31	26	...							
	Dharampore ...	19·82	+7·26	3·90	17	22	+5·5							
	Kharsali ...	15·81	...	1·10	11	24	...							
	Rana ...	17·15	...	2·31	9	27	...							
	Jamuna Chetty ...	21·64	...	3·00	23	22	...							

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Note :— Data upto 9·0 Km. a.s.l. are given under Table A and data above 9·0 Km. under Table B.

In tables A & B

n represents the number of observations.

V represents the mean wind speed in m/second irrespective of direction.

v represents the resultant mean velocity in m/second.

D represents the direction of the resultant mean wind in degrees East of North.

For the co-ordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Weather Report–January 1950 and subsequent issues.

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

AUGUST 1950

STATION	AHMEDABAD												ALLAHABAD										
Time in I.S.T.	0230				0730				1430				0230				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	2·6	2·3	238	31	2·3	2·0	233	31	3·4	3·2	226	31	2·1	1·1	252	31	2·0	0·8	250	31	2·4	1·2
0·15 a.g. ...	31	8·0	7·5	246	30	6·5	5·9	240	31	7·1	6·8	233	29	6·4	3·2	260	30	5·3	2·2	260	31	4·7	2·9
0·6 a.s.l. ...	30	10·7	10·4	255	30	9·9	9·6	256	31	7·2	7·0	234	29	7·1	2·7	280	25	6·6	3·6	290	31	5·0	2·6
1·0 ,, ...	25	8·5	8·3	246	25	9·2	8·8	253	29	7·7	7·5	240	27	6·3	3·1	288	22	6·1	2·4	287	28	5·2	1·7
1·5 ,, ...	22	6·7	6·1	230	17	8·8	8·4	240	28	8·4	8·3	249	25	5·7	2·6	292	19	5·2	2·9	284	25	4·8	1·8
2·0 ,, ...	13	5·2	3·5	275	9	4·8	4·2	238	13	5·6	5·3	263	22	4·9	1·4	291	15	3·3	2·0	282	19	4·5	1·1
2·5 ,, ...	10	5·1	2·3	326	5	5·5	4·8	271	7	2·4	1·9	309	16	3·8	0·7	281	14	3·3	0·7	218	15	3·9	1·8
3·0 ,, ...	7	4·2	2·1	341	4	6·5	5·9	267	6	2·3	1·6	322	13	3·3	1·1	56	13	2·8	0·7	242	15	4·0	2·0
4·0 ,, ...	2	4·0	3·1	328	2	5·0	2·4	9	3	3·8	2·7	345	5	4·3	1·0	204	10	4·1	2·5	306	11	4·4	2·0
5·0 ,, ...					1	1·0	1·0	335	3	5·0	3·6	39	3	4·5	3·8	277	9	4·8	1·9	245	9	3·4	0·4
6·0 ,, ...					1	1·5	1·5	285	2	3·5	1·9	340	1	7·0	7·0	320	9	4·1	1·1	243	7	3·8	2·1
7·5 ,, ...					1	5·0	5·0	80	2	1·7	1·5	107					5	2·7	1·6	240	4	3·1	1·7
9·0 ,, ...					1	8·5	8·5	80	2	9·3	9·2	73					1	2·0	2·0	150	4	2·7	2·5

STATION	AMBALA												ANANTAPUR								ASANSOL		
Time in I.S.T.	0230				0730				1430				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	1·0	1·0	116	31	1·6	1·1	119	31	1·8	0·3	339	31	4·0	3·8	259	31	5·4	4·6	270	31	1·3	0·7
0·15 a.g. ...	30	4·6	2·5	132	30	4·3	2·3	133	30	3·5	0·6	225	31	7·3	6·9	257	31	7·1	6·2	271	28	4·8	2·5
0·6 a.s.l. ...	30	4·8	2·0	151	30	5·3	1·6	161	30	3·7	0·9	205	31	8·4	8·0	261	31	7·0	6·2	270	27	5·3	2·4
1·0 ,, ...	29	4·4	1·6	251	27	5·4	1·5	258	30	3·7	1·4	249	31	11·1	10·3	276	31	8·5	7·6	273	24	4·0	2·0
1·5 ,, ...	29	5·1	3·1	293	26	4·7	1·7	291	29	4·8	2·9	305	27	10·9	9·1	283	31	9·0	7·7	276	21	3·9	1·6
2·0 ,, ...	23	6·2	3·7	319	22	4·7	2·4	334	27	5·5	3·5	317	25	8·6	5·8	284	28	9·7	7·6	278	11	2·9	0·7
2·5 ,, ...	21	6·5	4·2	330	18	4·7	2·6	333	21	6·0	4·2	338	24	7·6	4·9	287	20	9·3	5·6	283	10	2·6	0·7
3·0 ,, ...	17	4·9	2·9	330	18	4·7	2·7	339	18	5·6	4·5	325	23	8·0	4·8	291	14	9·3	4·0	287	8	3·7	1·7
4·0 ,, ...					11	4·1	2·7	343	13	4·7	2·4	324	17	6·2	1·7	245	6	7·4	0·9	112			
5·0 ,, ...					9	3·4	0·7	339	9	5·2	3·2	344	14	6·9	2·2	168	6	7·6	3·8	131			
6·0 ,, ...					5	4·1	1·5	240	5	4·4	2·6	333	12	6·2	3·7	102	3	7·8	7·7	91			
7·5 ,, ...					1	3·5	3·5	270	3	4·3	4·1	279	8	7·5	6·9	96	1	6·5	6·5	80			
9·0 ,, ...					1	9·0	9·0	280	2	5·5	5·5	290	5	13·4	12·2	98							

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

AUGUST 1950

STATION	ASANSOL								BANGALORE												BAREILLY			
Time in I.S.T.	0730				1430				2030				0730				1430				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·6	0·7	160	31	2·4	0·9	152	31	3·5	3·3	266	31	3·3	3·2	259	31	4·3	3·6	273	31	1·4	0·2	7
0·15 a. g. ...	27	5·2	1·7	154	30	5·7	1·7	160	29	7·8	7·1	265	31	6·7	6·0	263	31	7·2	6·4	263	27	3·6	0·1	295
0·6 a.s.l. ...	25	4·9	1·3	189	30	6·3	1·7	181													25	6·5	1·3	325
1·0 ,, ...	20	4·8	1·2	262	25	5·2	0·7	202	29	6·0	5·4	265	31	6·0	5·5	261	31	6·8	5·9	262	24	6·8	1·0	308
1·5 ,, ...	16	3·9	0·9	2	18	4·5	1·4	210	21	10·9	9·5	282	22	9·8	8·6	278	31	7·4	6·4	269	22	5·8	0·6	140
2·0 ,, ...	12	3·9	0·9	10	14	4·7	1·2	181	16	8·4	6·9	280	14	7·7	4·4	295	25	8·3	6·4	274	16	5·7	0·8	71
2·5 ,, ...	8	4·3	0·7	314	12	5·3	1·1	208	15	7·5	5·4	274	13	5·9	2·9	289	17	7·9	5·0	276	12	5·7	1·2	68
3·0 ,, ...	7	4·8	0·4	257	9	5·8	1·4	277	8	6·0	2·8	279	11	4·6	1·0	325	13	6·0	3·6	272	12	4·9	0·6	15
4·0 ,, ...	5	4·5	1·2	52	2	3·7	3·7	271					7	3·4	0·2	360	8	6·3	4·5	269	6	3·0	0·8	26
5·0 ,, ...	1	5·5	5·5	266									2	3·7	0·7	327	6	3·1	2·3	266	4	4·4	1·7	312
6·0 ,, ...	1	3·5	3·5	320									2	4·3	3·7	70	4	4·5	0·8	197	2	3·5	2·7	76
7·5 ,, ...													2	9·7	9·6	99								
9·0 ,, ...																								

STATION	BAREILLY				BHAGALPUR								BHOPAL											
Time in I.S.T.	1430				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·7	0·3	343	31	2·3	1·7	109	31	2·3	1·3	109	30	3·9	3·5	263	31	4·0	3·7	270	31	4·9	4·5	259
0·15 a. g. ...	31	3·5	0·8	289	29	5·9	2·8	107	31	5·3	2·4	96	25	8·2	7·8	271	23	8·6	8·2	271	27	7·3	7·0	268
0·6 a.s.l. ...	31	3·8	0·9	268	21	5·0	1·3	166	31	7·1	2·7	117	27	7·6	7·2	266	23	7·3	7·0	268	27	7·0	6·7	268
1·0 ,, ...	31	4·4	1·3	268	19	4·2	1·4	147	26	7·3	3·5	11	24	9·9	9·6	275	20	10·7	10·2	277	25	8·0	7·8	271
1·5 ,, ...	27	5·9	2·1	271	17	4·6	0·8	128	20	6·6	2·4	120	18	8·1	7·5	282	14	8·0	7·1	273	23	8·4	8·2	272
2·0 ,, ...	21	6·4	1·9	275	14	4·3	0·6	256	15	6·9	1·7	162	9	5·7	3·7	259	11	4·7	2·5	257	19	7·0	6·7	277
2·5 ,, ...	18	5·7	1·1	251	9	3·5	0·7	252	11	6·2	1·7	164	7	4·2	1·5	278	10	4·5	2·6	248	10	4·8	4·3	276
3·0 ,, ...	18	5·5	0·3	216	9	3·2	0·5	262	11	5·8	0·9	121	6	3·7	0·9	306	9	3·9	1·7	278	7	4·1	3·0	321
4·0 ,, ...	14	5·4	0·4	40	7	4·3	1·2	101	6	5·3	3·8	92	4	3·0	2·3	302	4	7·5	6·7	348	7	5·2	3·0	3
5·0 ,, ...	10	4·1	0·6	356	5	4·7	1·8	126	4	4·0	1·7	123	1	7·5	7·5	270	3	3·2	1·0	316	5	3·9	0·5	261
6·0 ,, ...	5	3·7	2·3	128	5	4·7	1·7	83	2	5·5	5·3	84					3	2·7	1·8	93	3	3·2	2·2	118
7·5 ,, ...	1	8·0	8·0	270	2	2·3	1·1	124	1	4·5	4·5	128					3	4·5	4·4	85	2	4·3	4·3	113
9·0 ,, ...																	3	7·7	7·4	79	1	5·0	5·0	85

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

AUGUST 1950

STATION	BHUJ												BIKANER								BOMBAY			
Time in I.S.T.	0230				0730				1430				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	31	3·8	3·7	233	31	3·4	3·2	230	31	4·3	4·1	233	31	2·4	2·3	221	31	2·3	2·2	207	31	4·9	4·7	
0·15 a.g. ...	31	9·1	9·1	238	31	9·4	9·2	241	31	10·0	9·8	239	31	7·3	5·7	242	31	5·5	4·4	206	31	7·2	6·6	
0·6 a.s.l. ...	31	12·5	12·4	241	31	13·3	13·1	249	31	10·5	10·4	243	31	10·0	9·1	237	31	5·3	4·3	212	31	8·3	7·7	
1·0 ,, ...	22	11·3	11·2	241	27	12·9	12·6	249	30	10·1	9·9	245	28	6·1	4·3	228	30	5·6	4·4	210	28	8·2	7·8	
1·5 ,, ...	9	6·0	5·3	246	14	9·0	8·7	245	16	5·9	5·2	269	27	3·8	1·6	147	29	5·9	3·9	206	13	5·4	4·9	
2·0 ,, ...	7	3·8	1·6	300	3	2·7	0·4	303	11	4·7	3·4	276	26	4·1	0·2	42	24	4·2	0·3	292	10	3·7	2·3	
2·5 ,, ...	5	4·0	1·8	328	1	6·0	6·0	45	6	3·9	0·3	262	26	5·0	1·2	350	23	4·3	1·7	332	8	3·1	0·3	
3·0 ,, ...	5	5·6	3·7	352	1	8·0	8·0	50	6	2·9	1·4	68	24	4·6	2·0	339	22	5·8	3·8	345	5	3·3	1·7	
4·0 ,, ...	4	6·3	5·6	32	1	16·5	16·5	40	4	4·1	3·6	48	21	6·4	4·1	347	22	8·0	5·9	350	4	2·7	1·9	
5·0 ,, ...	4	7·1	5·3	33	1	14·0	14·0	35	3	4·5	4·3	69	15	5·6	3·0	4	19	6·1	3·8	340	1	4·5	4·5	
6·0 ,, ...	1	2·0	2·0	35	1	17·0	17·0	40	3	4·0	3·3	92	13	6·3	0·2	103	15	7·4	3·6	315	1	6·0	6·0	
7·5 ,, ...					1	6·5	6·5	40	2	4·7	4·7	103	9	4·7	1·4	337	11	7·6	3·5	324				
9·0 ,, ...					1	7·0	7·0	55	2	6·0	5·8	105	6	5·1	3·8	303	9	4·9	1·6	307				

STATION	BOMBAY								CALCUTTA												COCHIN (Willingdon Isla			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	31	4·6	3·7	232	31	6·2	5·2	255	31	2·6	1·8	194	31	2·6	1·9	199	31	3·7	2·5	194	31	1·1	0·2	
0·15 a.g. ...	31	7·6	5·9	243	31	8·6	7·6	259	31	6·6	5·1	196	31	5·0	3·4	202	31	5·2	3·7	202	21	3·8	2·1	
0·6 a.s.l. ...	31	9·0	8·3	252	30	8·8	7·9	260	31	8·5	7·1	224	30	7·4	4·9	224	31	6·6	4·3	208	19	7·0	5·7	
1·0 ,, ...	25	7·3	6·9	256	27	8·4	7·7	255	30	8·1	6·7	233	27	6·7	4·1	235	30	6·8	5·4	213	16	8·6	7·9	
1·5 ,, ...	17	7·1	6·1	249	18	6·2	5·6	246	28	6·8	4·9	224	24	5·7	3·0	226	27	6·8	5·0	214	10	7·9	6·9	
2·0 ,, ...	9	7·4	5·9	239	12	4·6	4·0	236	21	5·2	2·7	213	21	5·2	2·9	227	25	5·9	4·2	216	8	8·1	7·1	
2·5 ,, ...	5	4·3	3·2	189	9	2·8	2·1	247	17	5·0	1·9	206	13	4·2	2·0	249	19	5·0	3·3	210	4	5·6	3·7	
3·0 ,, ...	4	1·0	0·9	98	9	3·1	1·1	338	13	4·4	1·2	201	14	4·6	1·6	236	19	5·5	3·2	198	2	4·3	4·1	
4·0 ,, ...	3	6·2	6·2	74	8	4·7	4·5	54	3	5·3	4·3	109	5	4·1	1·7	126	9	4·3	1·9	105				
5·0 ,, ...	3	5·2	5·0	74	8	3·9	2·5	95					3	5·8	2·9	158	4	5·0	1·9	127				
6·0 ,, ...	3	4·5	4·2	83	6	6·0	5·7	109					1	3·0	3·0	185	4	5·4	1·3	216				
7·5 ,, ...	2	6·7	6·5	79	3	11·7	11·5	93									2	5·0	4·7	87				
9·0 ,, ...	1	13·5	13·5	90	1	13·5	13·5	100									2	6·0	6·0	108				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

AUGUST 1950

STATION	COCHIN (Willingdon Island)								COOCH BEHAR								CUTTACK							
Time in I.S.T.	0730				1430				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·0	0·5	55	31	3·2	2·6	274	31	1·4	1·1	103	31	1·5	0·9	130	31	1·1	1·0	230	31	1·1	1·0	235
0·15 a.g. ...	29	3·4	1·1	354	30	4·9	4·0	280	22	4·5	3·7	112	30	3·6	2·3	138	28	6·3	5·7	234	30	6·3	5·8	241
0·6 a.s.l. ...	28	7·3	5·8	302	25	8·7	7·5	294	17	7·7	6·6	110	29	5·5	3·9	143	27	9·4	8·6	252	30	9·9	8·9	255
1·0 ,, ...	24	8·7	7·4	299	19	10·3	9·3	300	14	7·7	6·8	104	24	6·7	5·2	130	26	9·8	9·1	271	29	11·0	9·7	271
1·5 ,, ...	20	8·5	7·6	300	13	10·0	9·1	300	12	9·5	8·9	92	16	8·2	6·0	115	24	10·3	9·5	283	25	9·7	8·8	280
2·0 ,, ...	11	8·5	7·5	305	10	8·3	7·2	293	9	9·6	9·5	96	14	8·6	6·0	114	15	7·3	6·5	284	20	8·5	7·6	279
2·5 ,, ...	3	7·2	6·4	293	6	7·0	6·1	290	5	9·4	9·3	96	12	9·4	7·1	112	10	5·0	3·9	306	15	5·6	4·7	266
3·0 ,, ...	2	7·5	6·7	273	3	6·8	6·7	282	4	9·9	9·8	91	7	11·4	11·1	103	8	4·6	3·0	281	12	6·3	5·2	268
4·0 ,, ...	1	3·0	3·0	230	1	1·5	1·5	180	2	9·3	8·9	92	6	9·7	8·3	110	6	7·0	4·8	231	6	4·7	2·5	273
5·0 ,, ...					1	3·0	3·0	155	2	4·3	4·2	111	5	11·7	8·6	93					5	4·0	1·9	247
6·0 ,, ...					1	1·5	1·5	50	1	4·0	4·0	124	4	6·6	2·8	50					4	5·1	4·0	232
7·5 ,, ...													2	5·3	3·9	357					2	3·5	3·5	82
9·0 ,, ...													1	3·5	3·5	86					1	11·5	11·5	90

STATION	CUTTACK				DEOLALI				DIBRUGARH								GAUHATI							
Time in I.S.T.	1430				0730				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·7	1·5	228	25	3·5	3·5	263	31	1·5	0·9	38	31	2·3	0·9	11	31	4·5	3·8	253	31	3·5	3·5	257
0·15 a.g. ...	28	5·1	4·2	230	22	8·3	8·1	248	18	2·8	1·5	53	30	2·5	0·4	23	28	10·2	9·7	261	29	8·7	8·1	257
0·6 a.s.l. ...	27	6·9	5·9	251	22	4·7	4·5	252	15	3·1	1·6	55	30	2·5	0·7	181	...	...	...	...	...	...	...	...
1·0 ,, ...	26	8·5	7·4	267	22	10·3	10·1	250	13	3·6	0·4	73	27	2·9	1·5	227	27	12·0	11·4	273	27	10·2	9·1	274
1·5 ,, ...	26	9·4	8·5	274	18	10·3	9·9	255	13	4·0	1·6	233	25	4·0	2·5	215	20	10·9	9·5	283	19	10·7	8·3	282
2·0 ,, ...	22	10·3	9·3	274	13	7·1	6·3	253	9	3·3	1·3	111	24	4·3	3·6	196	17	9·7	6·8	281	15	8·4	3·9	277
2·5 ,, ...	12	7·3	5·8	253	9	4·1	2·3	207	9	3·8	2·0	102	21	4·7	3·2	186	16	7·3	3·6	295	11	6·5	1·8	53
3·0 ,, ...	9	7·3	4·7	259	9	2·8	0·7	173	7	3·4	3·3	84	20	4·4	2·7	177	14	6·2	1·5	317	9	6·7	4·4	79
4·0 ,, ...	5	3·7	0·8	260	9	4·2	2·6	52	7	3·4	2·6	115	19	4·3	1·6	153	11	5·1	1·1	115	8	6·4	5·4	93
5·0 ,, ...	3	2·7	2·2	311	9	3·7	2·9	42	6	3·6	2·9	94	16	4·4	0·7	80	8	4·7	2·2	88	6	8·0	5·7	110
6·0 ,, ...	2	3·5	1·9	89	7	4·3	4·1	67	5	4·0	2·4	78	15	3·9	1·4	13	5	3·5	0·4	349	6	7·8	7·4	80
7·5 ,, ...	2	5·7	5·7	97	6	8·2	7·9	83	5	3·7	0·9	51	12	4·7	3·6	313	3	4·2	1·7	75	2	8·5	8·5	86
9·0 ,, ...					3	11·8	11·6	98	4	5·6	1·9	35	8	6·7	4·7	309	1	1·5	1·5	305	1	11·0	11·0	109

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

AUGUST 1950

STATION	GADAG				GAYA												GOPALPUR						
Time in I.S.T.	1430				0230				0730				1430				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	5·0	4·5	260	31	3·0	0·3	172	31	3·4	0·6	178	31	4·3	0·6	54	31	3·0	2·9	217	31	5·0	4·7
0·15 a.g. ...	30	9·3	8·3	260	28	4·7	0·6	143	30	5·6	0·8	141	31	5·8	1·5	40	31	6·5	6·2	223	30	8·1	7·3
0·6 a.s.l. ...	...	...	...	...	28	5·2	0·8	148	28	6·2	0·5	192	30	6·1	1·5	25	31	7·4	6·7	249	30	6·2	4·6
1·0 ,, ...	30	9·3	8·2	266	27	5·0	0·8	27	24	5·9	1·1	80	25	5·9	0·7	40	30	8·6	7·6	271	29	7·0	5·7
1·5 ,, ...	28	9·9	8·9	274	22	5·5	1·7	340	20	5·0	0·5	31	18	6·9	0·5	124	25	8·5	7·7	283	23	8·4	6·9
2·0 ,, ...	20	9·3	7·4	287	18	4·5	0·6	322	16	4·3	0·4	340	17	6·8	1·0	183	15	7·4	6·4	292	18	7·2	5·4
2·5 ,, ...	15	8·2	5·1	290	9	4·2	1·2	259	14	4·5	0·8	109	10	6·2	2·0	243	8	4·3	3·0	293	12	5·0	3·3
3·0 ,, ...	10	7·3	2·5	285	7	4·3	0·9	265	11	4·2	1·5	139	9	6·5	2·3	248	6	4·0	2·6	305	12	4·4	1·9
4·0 ,, ...	4	7·0	4·9	94					7	3·2	2·3	249	2	5·5	1·5	57	3	3·0	1·7	358	6	4·7	3·2
5·0 ,, ...	3	5·5	3·1	99					6	2·0	1·6	188					3	4·2	2·1	67	6	4·2	1·3
6·0 ,, ...	2	6·0	3·7	127					6	2·4	2·3	177					3	5·7	5·0	88	4	2·8	0·5
7·5 ,, ...	2	11·3	6·9	141					1	1·0	1·0	50					2	8·5	8·1	90	3	5·3	5·0
9·0 ,, ...	1	11·0	11·0	90					1	3·5	3·5	86					2	13·5	13·5	83	3	10·5	9·8

STATION	GORAKHPUR								HYDERABAD (Dn.)												JAGDALPUR		
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	2·1	1·0	60	31	2·2	0·7	77	31	4·5	3·4	263	31	4·7	4·3	270	31	5·2	4·1	278	31	1·5	1·4
0·15 a.g. ...	30	4·5	2·6	90	31	4·0	1·4	92	31	9·3	6·8	258	31	8·5	7·5	266	31	7·0	5·5	278	26	5·7	5·5
0·6 a.s.l. ...	22	6·9	3·1	122	31	5·2	2·0	95	31	6·6	5·2	259	31	6·3	5·5	267	31	7·0	5·6	278	26	4·3	4·1
1·0 ,, ...	20	7·3	2·5	128	28	6·2	2·3	113	31	12·7	9·1	266	31	11·7	9·9	278	31	7·3	6·0	277	26	7·3	6·5
1·5 ,, ...	15	7·5	2·7	117	26	7·3	2·9	127	30	10·8	8·1	281	29	11·5	9·3	285	31	8·3	6·7	278	25	8·6	7·7
2·0 ,, ...	13	5·7	1·6	90	25	6·7	2·5	139	30	9·9	7·8	289	28	10·3	8·0	289	31	9·5	8·0	281	21	8·0	7·4
2·5 ,, ...	11	5·3	1·2	123	22	6·4	1·7	143	23	8·0	6·2	292	26	7·7	5·3	298	24	9·1	7·2	281	18	7·1	6·5
3·0 ,, ...	9	4·6	1·1	64	20	5·8	1·9	147	16	5·3	3·6	283	25	6·7	4·4	299	11	5·5	1·7	270	15	6·0	4·7
4·0 ,, ...	8	3·6	1·8	99	12	4·5	0·2	269	6	5·9	2·6	97	12	5·5	1·3	35	5	4·6	3·0	263	9	3·5	1·1
5·0 ,, ...	5	3·0	1·8	117	9	4·1	0·9	35	3	8·5	8·5	99	9	5·9	3·9	92	1	2·5	2·5	175	8	3·4	2·3
6·0 ,, ...	3	3·3	2·0	150	7	4·9	1·7	149	1	10·5	10·5	75	8	6·8	6·1	95					4	2·1	1·5
7·5 ,, ...	3	2·8	2·3	95	3	4·3	3·9	233					5	8·9	8·7	88					2	5·5	5·4
9·0 ,, ...	2	6·5	6·1	78									2	14·1	14·3	86							

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

AUGUST 1950

STATION	JAGDALPUR								JAMSHEDPUR								JHARSUGUDA							
Time in I.S.T.	0730				1430				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·5	1·3	218	31	3·2	2·5	258	31	2·4	1·5	257	31	3·4	1·4	236	31	1·4	1·1	245	31	1·3	1·0	244
0·15 a. g. ...	27	4·6	4·3	235	30	6·0	5·0	271	29	3·2	1·7	246	28	4·5	1·8	222	25	5·0	3·4	247	30	5·2	3·9	243
0·6 a.s.l. ...	27	3·2	3·0	232	30	5·1	4·3	271	28	4·9	2·3	248	28	4·5	1·8	237	21	6·3	5·5	263	25	6·9	6·1	263
1·0 ,, ...	26	7·8	7·3	268	30	6·6	5·8	276	21	4·8	3·0	275	25	5·5	1·8	237	19	6·3	5·7	274	17	6·6	5·5	290
1·5 ,, ...	23	9·4	8·7	286	29	8·0	7·3	278	17	5·5	3·1	296	17	4·3	1·6	286	13	4·3	3·9	275	16	6·3	5·3	294
2·0 ,, ...	18	9·6	8·7	293	24	9·0	8·1	279	12	5·9	2·6	306	16	5·1	2·6	262	11	3·6	2·9	295	13	6·0	5·2	276
2·5 ,, ...	15	9·3	8·2	295	18	8·1	7·2	281	6	4·1	1·2	352	11	4·7	3·4	272	6	2·3	1·4	281	11	5·5	4·1	275
3·0 ,, ...	14	8·2	7·2	286	16	7·6	6·4	279	6	4·5	0·4	295	9	4·0	2·3	248	6	2·4	1·1	278	10	4·5	2·6	271
4·0 ,, ...	8	3·6	1·9	316	8	5·8	3·7	285	3	3·3	0·4	155	4	2·6	2·1	50	1	2·5	2·5	175	5	2·1	0·3	42
5·0 ,, ...	7	3·4	2·6	27	7	5·9	3·0	272	2	4·3	2·1	107	4	1·6	1·6	40					3	2·7	2·0	305
6·0 ,, ...	6	4·6	2·9	74	4	7·4	3·9	260	1	2·0	2·0	110	3	1·2	1·0	58					3	3·2	1·5	65
7·5 ,, ...	4	8·3	8·1	88	1	4·0	4·0	90	1	6·0	6·0	81	1	4·0	4·0	166					2	4·0	3·9	80
9·0 ,, ...	2	12·3	12·2	95	1	8·0	8·0	60	1	6·5	6·5	114	1	4·5	4·5	90					2	7·0	6·5	86

STATION	JHARSUGUDA				JODHPUR								JABALPUR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·3	2·1	250	31	3·1	3·0	230	31	3·9	3·6	226	31	5·2	4·8	224	31	2·3	2·1	255	31	2·3	2·1	255
0·15 a. g. ...	30	5·9	5·2	250	31	9·8	9·6	231	31	7·5	7·1	231	31	6·9	6·4	216	27	7·7	7·3	260	26	6·1	5·7	253
0·6 a.s.l. ...	29	6·6	5·9	257	31	11·4	11·2	236	27	11·1	9·9	238	31	7·4	6·6	220	27	8·3	7·9	263	25	6·9	6·6	259
1·0 ,, ...	22	6·1	5·1	265	27	11·7	11·2	236	24	11·1	9·8	239	30	8·1	7·0	224	23	9·8	9·2	280	17	8·7	8·2	278
1·5 ,, ...	17	5·9	4·8	280	21	6·6	6·5	230	20	8·3	5·7	227	28	7·7	6·2	223	23	10·1	9·2	292	15	6·8	6·4	289
2·0 ,, ...	13	6·0	5·7	282	17	3·6	0·3	180	16	4·3	1·1	212	16	5·3	1·9	279	16	6·6	6·0	285	13	5·1	3·8	274
2·5 ,, ...	12	6·6	6·1	283	16	5·1	1·8	15	10	3·6	0·1	325	14	5·3	2·2	315	11	4·1	3·2	283	10	4·8	3·0	251
3·0 ,, ...	11	5·4	4·8	280	14	5·2	3·4	337	9	3·8	1·4	16	13	5·1	3·6	2	11	3·8	2·4	308	10	4·3	2·7	278
4·0 ,, ...	4	4·3	1·6	286	4	6·7	5·8	12	6	5·2	4·7	2	11	6·9	5·1	28	5	2·7	2·3	269	7	3·2	1 3	259
5·0 ,, ...									6	7·2	6·9	30	10	7·3	6·2	22	2	3·7	2·3	148	7	3·2	0·1	89
6·0 ,, ...									5	8·5	8·0	48	10	8·9	7·1	24					6	3·7	2·1	89
7·5 ,, ...									2	8·3	5·6	32	7	9·0	6·1	28					3	5·3	5·0	103
9·0 ,, ...									2	12·3	10·3	49	5	5·5	4·6	40					1	6·0	6·0	70

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

AUGUST 1950

STATION	JABALPUR				MADHOSAGAR												MADRAS						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	2·6	2·3	263	30	3·4	2·8	235	31	3·3	2·2	247	31	3·9	1·6	282	31	2·8	2·2	215	31	3·1	2·6
0·15 a.g. ...	27	6·1	5·5	264	30	6·3	4·8	263	31	5·5	4·1	274	31	5·5	3·0	287	31	7·3	6·2	231	30	7·5	6·6
0·6 a.s.l. ...	27	6·3	5·7	265	30	7·7	5·8	279	27	8·2	7·7	289	31	5·6	2·9	292	31	8·9	7·5	251	30	9·2	8·2
1·0 ,, ...	24	6·7	6·2	277	29	7·2	5·1	293	22	8·1	7·4	292	28	6·0	3·0	286	31	8·2	6·7	269	30	8·9	8·1
1·5 ,, ...	19	6·5	5·6	286	26	5·0	3·8	315	21	5·4	4·3	301	25	5·5	3·2	284	31	7·8	6·1	288	30	8·4	7·1
2·0 ,, ...	14	5·9	4·8	285	23	4·1	2·4	337	20	4·0	2·0	312	19	4·5	3·2	276	31	7·2	5·3	304	30	7·2	5·8
2·5 ,, ...	13	5·1	4·1	282	17	3·7	2·4	352	17	3·7	0·8	12	16	4·0	2·6	287	29	7·2	4·5	290	30	6·5	4·9
3·0 ,, ...	10	4·7	2·9	289	16	3·6	2·1	345	13	3·3	1·8	344	13	4·2	2·5	306	26	6·4	4·3	285	29	6·8	4·7
4·0 ,, ...	9	4·2	1·8	342	8	4·5	2·1	281	8	4·6	4·4	328	8	5·2	2·2	305	4	7·1	1·5	316	22	6·6	3·8
5·0 ,, ...	7	3·1	0·5	119	5	4·1	1·9	255	5	7·7	7·5	349	3	2·5	1·1	274					14	5·5	1·1
6·0 ,, ...	4	2·1	0·9	119	3	3·0	2·1	254	2	9·7	8·5	26	2	4·0	3·9	253					12	5·6	3·3
7·5 ,, ...	3	3·7	2·3	158	1	5·0	5·0	265	1	3·5	3·5	100	1	2·0	2·0	245					8	8·3	7·7
9·0 ,, ...	2	5·7	5·2	91									1	2·5	2·5	45					6	10·5	10·1

STATION	MADRAS				MALEGAON												MANGALORE						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	4·3	1·5	166	31	3·6	3·4	262	31	3·6	3·5	266	31	5·0	4·4	266	31	2·7	0·9	265	31	2·3	0·8
0·15 a.g. ...	31	5·5	1·7	193	31	8·1	7·8	264	31	6·3	6·0	267	31	8·4	7·3	265	27	5·5	3·6	77	31	4·7	1·9
0·6 a.s.l. ...	31	5·4	3·5	250	31	8·1	7·8	264	31	6·3	6·0	267	31	8·4	7·3	265	26	7·5	6·3	288	31	7·5	6·0
1·0 ,, ...	31	6·3	4·9	267	31	9·0	8·4	266	31	8·0	7·7	263	31	8·1	8·1	263	21	8·3	7·0	290	24	7·9	6·9
1·5 ,, ...	31	7·9	6·6	275	30	9·9	9·5	263	27	9·5	8·7	260	31	9·1	8·7	264	16	8·4	7·4	288	20	7·8	6·0
2·0 ,, ...	30	8·8	7·3	279	21	7·6	7·2	260	19	8·3	7·5	248	19	10·5	10·0	268	12	7·6	5·6	293	14	7·5	3·9
2·5 ,, ...	27	9·3	7·2	281	16	5·8	5·0	251	15	7·5	6·0	254	11	7·2	6·8	266	8	5·5	1·3	327	8	6·6	2·3
3·0 ,, ...	25	9·0	6·5	285	11	2·8	1·2	258	12	5·1	2·7	268	8	5·7	3·9	272	6	5·9	0·1	214	7	6·8	4·4
4·0 ,, ...	17	7·2	4·5	278	8	4·7	2·7	10	10	4·9	2·1	9	4	5·6	3·6	57	1	4·0	4·0	225	3	9·7	3·1
5·0 ,, ...	14	6·6	3·0	285					9	4·9	3·4	55	2	4·5	4·4	78	1	7·0	7·0	189	1	7·0	7·0
6·0 ,, ...	14	7·2	1·6	283					9	3·9	2·8	43	2	3·3	3·2	130					1	6·0	6·0
7·5 ,, ...	9	8·3	4·4	98					7	5·7	4·0	83	2	5·0	4·9	117							
9·0 ,, ...	7	8·8	8·6	100					6	7·7	7·5	9?	1	9·5	9·5	95							

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

AUGUST 1950

STATION	MANGALORE				MASULIPATAM												MINICOY							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·5	2·6	268	31	2·7	1·9	224	31	2·5	1·8	254	31	3·4	2·0	273	31	4·6	4·2	289	31	4·0	3·6	286
0·15 a.g. ...	30	6·0	4·6	271	31	8·7	7·0	219	30	7·9	6·8	262	31	6·7	3·9	277	26	7·2	6·6	287	29	7·3	6·4	283
0·6 a.s.l. ...	28	8·0	6·5	286	31	11·5	9·5	257	30	11·7	10·3	281	31	6·9	5·4	282	26	9·4	8·8	290	29	9·4	8·8	284
1·0 ,, ...	24	8·9	7·6	291	31	11·7	9·7	271	30	13·1	11·3	286	31	8·7	7·2	287	25	10·7	10·3	295	28	10·6	10·0	289
1·5 ,, ...	17	8·1	7·2	293	31	12·1	10·0	281	30	11·4	9·3	282	31	10·8	9·0	290	20	11·3	11·1	296	27	11·1	10·8	295
2·0 ,, ...	12	5·7	4·3	298	29	11·8	9·0	284	30	9·5	7·3	288	29	11·3	9·1	288	19	10·8	10·6	297	23	10·3	9·9	296
2·5 ,, ...	9	4·9	3·7	295	22	9·9	7·4	285	30	9·2	6·8	283	25	11·0	8·2	283	15	9·8	9·3	286	16	7·7	7·3	294
3·0 ,, ...	9	6·1	3·4	292	20	9·6	7·1	290	30	8·8	6·0	285	24	11·1	7·7	283	14	8·5	7·9	282	15	6·8	6·4	278
4·0 ,, ...	6	3·7	1·3	203	10	6·9	0·6	343	17	9·1	4·9	276	19	8·2	3·5	288	7	5·2	2·6	256	13	5·5	5·1	257
5·0 ,, ...	2	9·3	7·6	108					9	7·4	3·1	274	14	7·4	0·4	227	2	4·5	4·5	197	11	3·7	2·3	249
6·0 ,, ...									7	7·5	1·8	307	13	6·9	2·9	115	1	10·5	10·5	230	7	4·7	1·6	17
7·5 ,, ...									5	6·8	6·5	96	10	6·3	5·9	90					5	7·2	3·3	116
9·0 ,, ...									2	13·7	13·5	94	5	10·8	10·8	97					2	12·3	10·2	86

STATION	MINICOY				NAGERCOIL												NAGPUR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	5·2	4·7	288	31	4·3	3·9	290	31	3·8	3·5	295	31	6·2	5·4	281	31	2·3	2·1	263	31	2·5	2·3	269
0·15 a.g. ...	28	7·4	6·9	284	31	9·5	9·2	295	31	8·3	8·1	296	31	11·7	11·1	280	30	6·4	5·4	273	28	6·0	5·3	267
0·6 a.s.l. ...	27	9·6	9·1	285	31	15·3	14·7	299	31	14·4	13·7	298	31	13·6	13·2	291	30	7·8	6·7	281	28	7·8	6·9	280
1·0 ,, ...	23	11·1	10·7	291	30	16·5	15·9	298	31	15·2	14·5	297	30	14·3	13·9	298	29	9·2	8·4	286	28	9·2	8·2	288
1·5 ,, ...	18	11·1	10·8	296	29	10·8	10·2	292	29	12·7	11·8	293	29	13·1	12·4	300	29	8·8	8·3	285	27	8·5	7·6	292
2·0 ,, ...	17	9·8	9·5	296	29	12·3	11·1	290	29	10·7	9·5	288	28	11·1	10·3	292	24	7·7	6·9	280	23	8·1	7·6	278
2·5 ,, ...	12	8·9	8·6	288	22	7·1	4·8	295	28	10·1	8·8	286	27	10·9	9·7	287	16	6·1	4·9	281	18	7·7	7·1	278
3·0 ,, ...	11	8·5	8·1	279	22	5·3	3·2	297	27	7·1	5·9	281	25	8·3	7·6	290	11	4·5	3·0	283	16	6·8	6·0	277
4·0 ,, ...	7	5·4	4·3	239	5	9·3	9·0	276	18	4·9	3·1	284	18	5·6	4·3	277	3	2·0	1·2	8	9	5·1	4·0	315
5·0 ,, ...	6	3·5	3·1	251					8	5·6	2·8	262	9	4·4	3·3	264	1	2·0	2·0	329	8	4·1	2·6	323
6·0 ,, ...	5	4·9	2·8	237					5	6·5	3·3	134	7	4·1	0·9	333	1	3·0	3·0	200	4	3·7	1·2	101
7·5 ,, ...	4	7·9	7·5	104					3	9·3	1·0	258	6	8·6	5·5	86					2	3·7	3·7	105
9·0 ,, ...	3	8·3	8·0	122					2	14·3	14·1	97	5	13·6	8·6	90					1	10·0	10·0	85

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

AUGUST 1950

STATION	NAGPUR				NEW DELHI												POONA						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	3·1	2·7	280	31	2·8	1·5	249	31	2·5	1·9	264	31	2·4	1·0	276	31	3·4	3·3	274	31	3·5	3·4
0·15 a. g. ...	30	5·3	4·3	277	29	7·5	4·5	253	27	5·6	5·3	233	31	4·0	0·7	296	30	6·6	6·5	258	31	6·0	5·6
0·6 a.s.l. ...	30	6·0	5·4	274	28	7·6	5·1	264	27	8·5	6·6	290	31	3·7	1·0	296	30	4·4	4·3	260	31	4·3	4·1
1·0 ,, ...	29	7·1	6·5	279	29	5·8	3·5	275	26	6·7	5·2	303	31	3·9	1·7	290	30	8·4	8·0	257	31	8·9	8·1
1·5 ,, ...	28	7·5	7·0	286	29	4·3	2·2	308	24	4·5	2·9	320	29	4·8	1·9	285	22	10·4	9·1	260	20	10·8	8·8
2·0 ,, ...	21	7·3	6·8	290	26	4·3	2·4	340	23	4·3	2·5	346	28	5·4	2·0	292	15	7·7	5·1	256	15	8·1	5·3
2·5 ,, ...	11	6·9	6·5	293	19	4·5	3·0	341	21	4·5	2·3	346	29	5·2	2·2	320	6	3·0	1·2	157	10	5·1	1·4
3·0 ,, ...	8	4·8	4·0	305	14	4·8	3·0	353	19	4·8	2·5	326	28	5·6	2·8	335	3	1·3	0·7	75	8	2·7	2·3
4·0 ,, ...	5	3·1	1·0	338	2	5·0	4·1	306	15	5·5	2·6	351	22	6·3	4·0	341	1	5·0	5·0	80	6	5·9	5·8
5·0 ,, ...	2	3·0	2·3	155	1	2·5	2·5	210	11	5·5	2·0	330	17	6·2	2·0	2					5	4·1	2·7
6·0 ,, ...	2	5·0	3·5	100					8	4·0	1·3	121	12	4·9	1·3	6					5	5·3	4·8
7·5 ,, ...	2	4·5	4·1	125					6	3·3	1·0	237	5	5·2	3·4	271					4	9·1	8·8
9·0 ,, ...	2	9·3	9·0	96					4	3·6	1·2	280	4	5·6	4·4	282					2	13·0	13·0

STATION	POONA				PORT BLAIR												RAIPUR						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	5·4	5·1	277	31	4·0	3·7	230	31	3·7	3·3	237	31	5·6	5·1	233	31	1·6	1·5	237	31	1·8	1·6
0·15 a. g. ...	30	8·5	8·3	262	31	7·4	6·9	238	31	7·9	7·1	236	29	8·8	7·8	234	17	5·9	5·4	250	22	6·1	5·3
0·6 a.s.l. ...	30	6·1	5·9	264	29	10·2	9·7	237	28	10·1	9·0	235	28	10·4	9·3	242	17	6·4	5·8	267	22	8·2	7·2
1·0 ,, ...	30	9·3	9·0	262	26	10·2	9·5	239	25	10·2	9·1	238	21	9·5	8·2	245	17	5·3	4·9	279	22	8·7	8·1
1·5 ,, ...	24	10·4	10·1	263	19	7·6	7·0	241	22	9·3	8·3	242	15	7·5	6·0	242	17	5·7	5·0	288	20	8·7	8·3
2·0 ,, ...	18	8·4	7·6	270	17	6·6	5·3	241	15	6·0	4·5	240	14	6·8	5·0	247	17	6·1	5·2	286	17	9·4	9·0
2·5 ,, ...	9	5·8	3·6	256	11	6·1	5·8	245	14	5·6	3·7	235	9	7·8	4·3	236	15	5·4	4·3	283	10	7·1	6·8
3·0 ,, ...	6	3·3	1·5	96	9	4·9	4·1	251	12	5·9	2·7	234	7	7·8	2·6	256	13	5·1	3·7	283	3	7·0	6·5
4·0 ,, ...	2	5·0	4·5	78	3	3·7	1·0	198	6	5·7	4·5	133	4	8·0	4·0	137	7	3·0	1·5	11	5	2·2	1·4
5·0 ,, ...	2	2·3	0·3	90					4	6·6	6·4	100	2	2·3	1·1	90	5	3·4	2·2	27	4	3·0	2·1
6·0 ,, ...	2	4·5	4·3	72					3	6·8	6·4	92	2	4·5	2·3	62	4	2·3	1·9	14	3	3·8	3·2
7·5 ,, ...	2	9·0	8·9	104					2	8·5	8·4	97	2	7·3	4·1	105							
9·0 ,, ...	2	11·5	11·1	102									2	12·0	12·0	120							

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

AUGUST 1950

STATION	RAIPUR				TEZPUR												TIRUCHIRAPALLI							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·6	2·5	252	30	0·7	0·3	120	31	0·9	0·6	95	31	0·8	0·2	83	31	3·1	2·9	271	31	3·4	2·2	273
0·15 a.g. ...	27	6·5	6·1	259	17	3·5	1·4	132	26	3·6	1·5	125	31	3·0	0·9	89	30	8·8	8·2	271	31	8·1	7·9	272
0·6 a.s.l. ...	27	7·3	7·1	263	15	3·9	2·0	184	24	3·8	1·2	144	29	3·6	1·4	160	30	11·6	11·4	273	31	11·3	11·0	277
1·0 „ ...	26	8·3	8·0	272	12	3·2	2·0	199	20	4·7	1·9	170	29	4·4	1·9	188	30	9·0	8·6	278	31	10·0	9·4	277
1·5 „ ...	25	9·0	8·6	283	8	2·6	1·5	153	18	5·1	1·7	158	27	5·1	2·7	198	29	6·6	5·7	275	31	7·7	6·8	271
2·0 „ ...	20	9·3	8·7	280	8	2·9	1·7	112	11	4·1	3·1	108	27	6·1	3·1	200	29	5·9	4·1	283	31	6·4	4·9	274
2·5 „ ...	14	7·3	6·3	286	5	3·0	2·2	96	8	4·8	4·5	88	23	6·0	2·9	204	24	5·1	4·3	280	30	5·9	4·0	281
3·0 „ ...	10	6·2	4·7	284	4	4·4	2·5	89	8	5·1	3·9	90	20	5·8	1·8	172	23	5·2	4·2	280	29	6·0	3·8	276
4·0 „ ...	7	3·4	2·9	263	1	5·5	5·5	75	5	5·7	4·8	80	14	5·7	0·9	138	1	5·5	5·5	285	24	4·9	1·7	286
5·0 „ ...	5	3·3	2·8	321					5	5·0	3·6	122	11	6·2	1·5	135					18	6·0	1·2	258
6·0 „ ...	3	4·2	1·1	79					3	4·2	2·5	148	7	3·6	1·8	75					16	6·6	1·7	111
7·5 „ ...	2	1·5	1·3	110					2	4·0	3·9	167	1	4·5	4·5	170					7	9·5	8·8	100
9·0 „ ...	2	5·3	5·3	89					2	3·5	3·5	103	1	1·5	1·5	160					2	13·5	13·5	120

STATION	TIRUCHIRAPALLI				TRIVANDRUM				UDAIPUR												VENGURLA			
Time in I.S.T.	1430				0730				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·4	2·7	279	31	1·7	1·4	339	31	2·3	2·1	223	31	1·7	1·5	231	31	2·9	2·6	232	31	1·5	1·4	264
0·15 a.g. ...	31	6·7	5·6	279	23	6·5	5·9	337	30	4·9	4·7	243	30	4·9	4·5	241	31	5·8	5·5	244	26	5·3	3·9	274
0·6 a.s.l. ...	31	7·0	6·4	272	22	10·4	9·5	313	...	...	...	...	...	...	...	...	...	...	...	...	25	8·3	6·9	285
1·0 „ ...	31	7·5	7·3	264	21	11·5	10·7	307	30	7·2	7·0	250	30	6·1	5·8	252	31	6·4	6·0	244	19	9·1	7·8	286
1·5 „ ...	30	8·6	7·9	262	19	11·1	10·6	302	18	6·0	5·1	258	18	6·6	5·0	255	29	6·3	5·8	255	10	8·2	6·9	281
2·0 „ ...	30	9·1	8·1	260	16	9·1	8·1	297	17	4·0	1·1	285	14	4·6	1·2	264	15	6·3	4·1	270	3	6·9	3·5	271
2·5 „ ...	30	8·6	7·3	260	11	7·0	5·5	286	13	5·5	2·5	360	12	4·1	1·4	349	10	6·5	4·7	322	5	4·9	0·2	172
3·0 „ ...	27	6·9	5·3	268	10	5·3	3·1	282	12	5·9	3·1	20	11	4·6	2·6	359	9	7·6	5·5	341	5	5·1	1·0	97
4·0 „ ...	20	5·7	2·9	289	6	3·6	1·5	248	2	8·5	8·1	34	8	5·4	5·1	14	9	7·0	6·8	8	2	1·3	1·1	357
5·0 „ ...	16	6·2	2·8	274	4	3·3	1·5	65	1	4·5	4·5	125	6	6·6	6·3	36	9	6·1	5·7	35				
6·0 „ ...	13	7·5	2·7	214	3	4·5	3·3	91					5	4·9	4·4	50	6	4·5	3·5	62				
7·5 „ ...	4	9·9	9·1	102	2	11·7	11·2	98					3	4·7	4·6	75	3	4·3	3·8	77				
9·0 „ ...	2	11·0	11·0	109	2	16·5	16·3	93					1	6·0	6·0	45	1	7·0	7·0	65				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

AUGUST 1950

STATION	VENGURLA								VERAVAL								VISAKHAPATNAM			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·9	1·4	272	31	3·5	3·3	262	31	9·6	9·3	245	31	6·7	6·2	253	31	6·7	6·2	255	31	1·4	1·2	223
0·15 a. g. ...	28	5·2	3·5	277	28	6·7	6·3	272	30	8·9	8·7	251	31	8·8	8·4	250	31	8·3	8·1	250	30	4·6	4·5	237
0·6 a.s.l. ...	27	7·5	6·5	281	27	8·4	7·8	276	25	9·9	9·7	257	29	10·5	10·2	255	31	9·6	9·4	258	30	7·4	6·9	252
1·0 ,, ...	22	7·9	6·6	287	24	8·7	7·8	278	19	8·9	8·7	255	24	9·6	9·5	258	24	8·0	7·9	263	29	8·5	7·9	265
1·5 ,, ...	15	7·3	4·9	281	14	7·0	5·9	286	11	6·6	5·3	263	14	7·7	7·3	257	15	6·0	5·6	262	25	10·4	9·2	274
2·0 ,, ...	11	5·5	2·1	291	9	3·8	1·3	309	5	4·3	3·1	349	4	2·0	1·0	319	10	4·8	3·7	295	19	10·5	8·7	285
2·5 ,, ...	7	6·6	0·9	83	6	5·0	0·5	306	5	6·1	5·1	20	4	3·6	3·4	16	9	5·1	3·9	345	4	3·9	2·2	234
3·0 ,, ...	7	5·9	0·4	123	4	4·1	2·5	122	5	6·3	5·8	36	3	5·3	4·9	25	8	5·3	3·7	17	4	3·4	1·9	235
4·0 ,, ...	4	3·3	2·9	81	2	3·0	1·8	98					2	3·0	2·5	37	8	5·6	4·9	48	1	2·0	2·0	10
5·0 ,, ...	4	4·3	3·8	99	1	2·5	2·5	185					1	2·0	2·0	70	8	3·8	3·5	111				
6·0 ,, ...	3	4·8	4·8	87	1	5·0	5·0	150					1	3·0	3·0	90	8	3·9	3·5	97				
7·5 ,, ...	2	7·7	7·7	68									1	11·0	11·0	90	7	7·0	6·9	99				
9·0 ,, ...	1	11·0	11·0	115									1	14·0	14·0	100	5	9·7	9·7	86				

STATION	VISAKHAPATNAM							
Time in I.S.T.	0730				1430			
Height in Km.	n	V	v	D	n	V	v	D
Surface ...	31	1·5	1·4	233	30	4·0	2·1	157
0·15 a. g. ...	29	4·6	4·3	242	29	5·7	2·7	172
0·6 a.s.l. ...	29	8·1	7·6	257	26	4·2	0·4	181
1·0 ,, ...	29	9·0	8·0	269	24	4·5	1·9	328
1·5 ,, ...	27	10·2	8·7	278	22	6·3	4·2	336
2·0 ,, ...	26	9·6	7·9	284	21	7·0	4·7	338
2·5 ,, ...	20	8·3	7·0	285	17	7·0	3·6	337
3·0 ,, ...	11	5·0	2·5	307	15	7·2	3·7	321
4·0 ,, ...	5	5·4	0·5	89	14	5·4	1·4	335
5·0 ,, ...	3	7·3	4·1	169	11	7·0	3·4	89
6·0 ,, ...	3	5·9	3·3	185	10	6·9	4·0	80
7·5 ,, ...					7	7·5	4·9	88
9·0 ,, ...					4	9·5	6·0	103

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

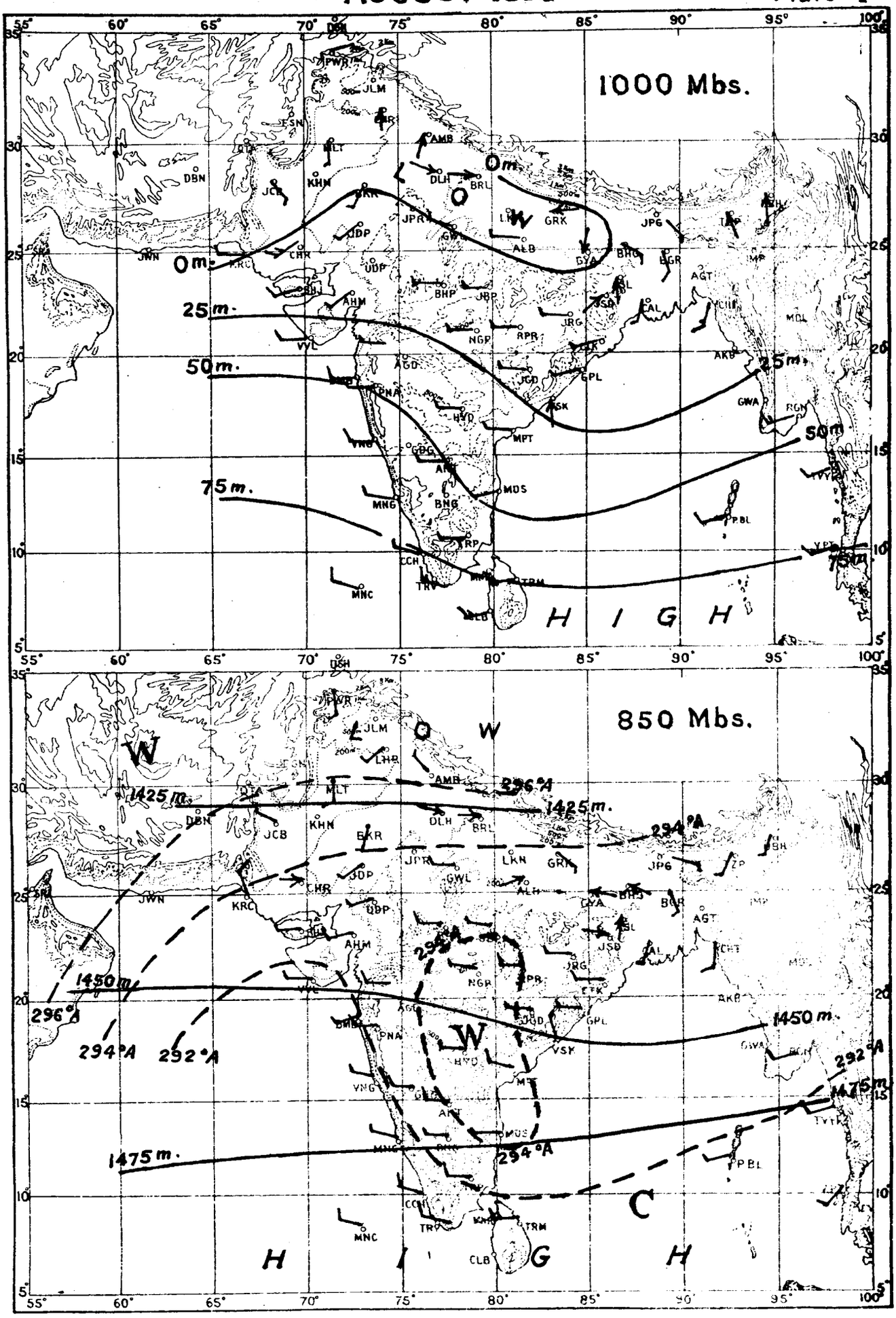
Winds at and above 10 Km. above sea level

AUGUST 1950

Height in Km.	n	V	v	D
	AHMEDABAD			
10	3	11·2	11·0	80
11	2	14·5	14·4	86
12	1	14·5	14·5	115
13	1	14·5	14·5	110
	ALLAHABAD			
10	3	3·5	3·4	96
11	2	5·0	4·7	123
12	1	5·0	5·0	94
	AMBALA			
10	1	2·0	2·0	25
11	1	3·0	3·0	280
12	1	1·0	1·0	230
13	1	1·0	1·0	265
	ANANTAPUR			
10	4	16·5	16·4	96
11	2	20·3	20·1	107
12	1	27·0	27·0	105
13	1	29·5	29·5	95
	BHOPAL			
10	4	8·0	7·9	84
11	3	9·5	9·3	91
12	3	13·3	13·2	95
13	3	16·2	15·7	90
14	1	15·0	15·0	80
	BHUJ			
10	1	6·0	6·0	115
11	1	9·0	9·0	105
	BIKANER			
10	13	5·5	2·9	312
11	6	5·9	2·0	348
12	5	5·5	3·2	18
13	5	6·9	3·8	24
14	5	6·7	4·5	27
15	5	8·3	4·9	50
16	5	7·9	5·7	47
17	3	7·2	6·3	78
18	3	9·0	8·0	78
19	2	7·0	5·8	57
20	2	9·7	5·7	80
21	2	9·0	8·0	75
22	2	11·0	9·0	75
23	2	12·0	11·3	65
24	2	14·5	14·3	56
25	2	18·4	17·9	59
26	2	22·5	22·4	59
27	2	21·7	21·4	68
28	2	24·7	24·4	56
29	2	39·0	18·8	62
30	1	16·5	16·5	45
31	1	26·0	26·0	40
32	1	24·0	24·0	35
33	1	26·0	26·0	35
34	1	23·5	23·5	30
35	1	21·0	21·0	25
36	1	26·0	26·0	10
37	1	36·5	36·5	10
	BOMBAY			
10	1	14·5	14·5	100
	CALCUTTA			
10	2	8·5	8·4	107
11	1	7·5	7·5	105
	DEOLALI			
10	2	11·3	11·2	102
	DIBRUGARH			
10	10	7·5	3·7	299
11	8	8·6	2·5	337
12	6	10·6	6·7	13
13	5	10·1	8·4	24
14	3	9·8	9·7	45
15	3	14·2	14·2	61
16	3	13·5	13·3	78
17	2	12·7	12·3	88
18	1	13·0	13·0	85
	GADAG			
10	2	12·3	12·0	100
	GOPALPUR			
10	5	14·1	14·0	87
11	3	15·5	15·5	89
12	3	18·7	18·7	90
13	1	19·0	19·0	75
14	1	23·0	23·0	85
15	1	23·0	23·0	75
	GORAKHPUR			
10	1	7·0	7·0	75
	HYDERABAD			
10	2	15·7	15·6	87
11	2	19·5	19·1	99
12	1	30·0	30·0	95
	JAGDALPUR			
10	2	15·7	15·7	95
11	1	22·5	22·5	95
12	1	27·5	27·5	90
13	1	28·0	28·0	100
	JAMSHEDPUR			
10	1	10·5	10·5	95
	JHARSUGUDA			
10	2	9·5	9·5	85
	JODHPUR			
10	5	4·6	4·5	99
11	3	6·7	5·9	103
12	2	5·7	5·3	114
13	2	3·7	3·7	142
14	2	7·3	7·1	138
15	2	8·0	7·9	100
16	2	12·7	12·1	107
	JABALPUR			
10	3	9·0	7·9	94
11	2	10·0	8·2	93
12	1	11·0	11·0	105
13	1	14·0	14·0	105
14	1	17·0	17·0	115
15	1	18·0	18·0	100
	MADHOSAGAR			
10	1	4·5	4·5	70
11	1	6·5	6·5	65
12	1	10·0	10·0	100
	MADRAS			
10	12	12·9	12·2	92
11	5	18·5	18·3	97
12	5	25·0	25·0	95
13	5	26·1	23·6	94
14	4	23·0	21·7	67
15	3	27·5	26·4	76
16	1	36·5	36·5	95
17	1	38·0	38·0	90
18	1	34·0	34·0	105
	MALEGAON			
10	7	9·7	9·4	101
	MASULIPATAM			
10	6	14·1	13·9	95
11	4	18·1	18·0	98
12	2	23·7	23·7	103
13	2	26·0	26·0	93
14	2	35·0	35·0	90
15	2	36·0	35·9	95
16	2	34·7	34·7	89
17	1	30·0	30·0	95
	MINICOY			
10	4	12·4	7·2	122
	NAGERCOIL			
10	4	18·4	17·6	94
	NAGPUR			
10	2	10·0	9·9	100
11	2	15·0	15·0	92
	NEW DELHI			
10	3	5·7	5·1	279
11	2	3·7	2·3	216
12	1	4·5	4·5	285
13	1	7·0	7·0	210
	POONA			
10	1	14·5	14·5	95
	PORT BLAIR			
10	1	13·0	13·0	90
11	1	21·0	21·0	100
12	1	27·5	27·5	90
13	1	32·0	32·0	90
	RAIPUR			
10	1	8·5	8·5	90
11	1	10·0	10·0	80
	TEZPUR			
10	2	4·3	4·3	85
	TIRUCHIRAPALLI			
10	3	12·7	4·4	112
11	1	14·0	14·0	100
	TRIVANDRUM			
10	2	18·5	18·5	86
11	2	24·3	24·2	88
12	1	28·5	28·5	90
13	1	33·5	33·5	85
	UDAIPUR			
10	2	8·3	8·0	60
	VERAVAL			
10	5	12·1	12·1	91
11	1	14·0	14·0	85
12	1	18·0	18·0	85
	VISAKHAPATNAM			
10	1	12·0	12·0	95

AUGUST 1950

Plate I



RESULTANT WIND —\— = 5 Knots, —\— = 10 Knots, —\— = 50 Knots.

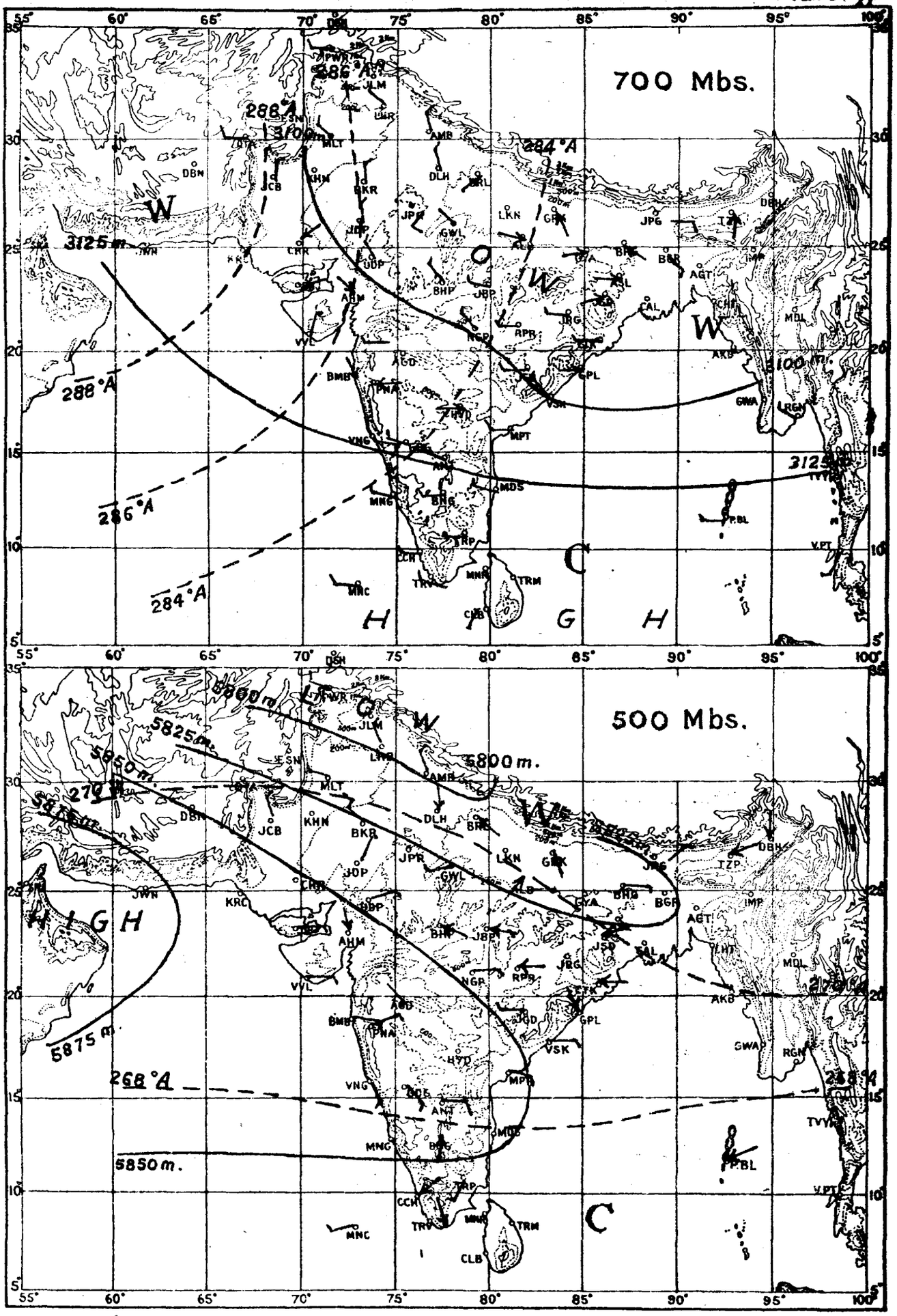
– – – – – Isotherms in degrees absolute.

——— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

AUGUST 1950

Plate II



RESULTANT WIND —\= 5 Knots, —\= 10 Knots, —\= 50 Knots.

------ Isotherms in degrees absolute. ——— Contours in geopotential metres.

G.P.Z. P. POONA, 53.

Gardens & Dept.

Registered No. B-3097

INDIA WEATHER REVIEW, 1950

MONTHLY WEATHER REPORT

SEPTEMBER

JUN 15 1959

Published by authority of the Government of India

CHIEF FEATURES:—(i) Excessive rainfall in the Punjab (I) in the beginning of the month and in the Punjab (I) and Kashmir in the third week, leading to disastrous floods in these areas (ii) exceptionally heavy rainfall in and near north Gujarat in the middle of the month, (iii) well-distributed and good monsoon over most of the remaining parts of the country and (iv) formation and movement of one depression and one cyclonic storm in the Bay of Bengal.

The low pressure area which lay over north Madhya Pradesh and Vindhya Pradesh at the end of the previous month moved westwards and concentrated into a shallow depression with its centre near Gwalior on the 1st morning. Moving slowly westwards, it became unimportant over east Rajasthan by the 5th. In association with it, the monsoon was fairly active over northern India and the western half of the Peninsula in the beginning of the month. Rainfall was particularly very heavy in the Punjab (I) on the 4th. Locally heavy falls also occurred in Kashmir. The heavy rains caused severe floods in the Ravi, the Beas and the Sutlej and breaches in the railways and roads all over the State besides land slips in the hills. The worst affected districts were Amritsar, Gurdaspur and Kapurthala where great damage was caused. In Jammu Province, a number of houses collapsed and hundreds of trees were uprooted due to continuous rains. Lines of communication remained cut off for two days.

The monsoon strengthened over the northern half of the Peninsula in the second week in association with a depression which formed in the Bay of Bengal off the Circars coast on the 9th morning, crossed the coast near Kakinada on 10th and weakened rapidly. Under its influence, locally very heavy falls of rain were reported from coastal Andhradesa, Hyderabad and north Deccan (Desh) between 9th and 12th.

Another depression formed in the Bay of Bengal on the 12th morning. It intensified into cyclonic storm of small extent during the course of the same day and crossed the coast south of Balasore on the night of 13th. It then weakened into a deep depression and moving westnorthwestwards lay over east Rajasthan with its centre about 40 miles southwest of Ajmer on the 18th morning. Thereafter it curved towards north and lay over north Rajasthan with its centre about 50 miles southwest of Delhi on the 19th morning. It broke up over the Punjab-Kumaon hills on the next day. In association with it, the monsoon was strong over the region extending from Orissa and Chota Nagpur to Gujarat and the Punjab (I) in the middle of the month. Rainfall was exceptionally heavy in and near north Gujarat; the Ahmedabad Air Port recorded 21" of rain during 24 hours ending at 1730 hrs. IST. on the 17th, Ahmedabad City recorded 18" during the same period. This rainfall was the heaviest recorded at that station during the last 57 years. Mount Abu reported a rainfall of 18" in 24 hours on the 18th morning. Locally very heavy rain was also reported from east Rajasthan on the 16th and from the hills and the submontane districts of the Punjab (I) between the 18th and 20th. Rail and telegraph communications were interrupted and hundreds of houses damaged in north Gujarat and Rajasthan due to the heavy rains. The worst affected areas in Rajasthan were Udaipur and Bikaner where more than 20 persons were reported to have been killed. Extensive damage was caused to property and crops by the floods in the Punjab (I), particularly in Amritsar, Gurdaspur, Hoshiarpur, Jullunder, Ferozepur and Ludhiana districts. Nearly 8½ lakhs acres of cultivated land were reported to have been affected by the floods. Over 2 lakhs of houses had fallen or were damaged and about seventy persons perished under fallen roofs. Rail and road communications were seriously dislocated. Many villages were isolated for a number of days and food had to be dropped by air to the marooned people in the heavily flooded areas. In Kashmir, the Jhelum breached its banks and submerged large areas of the Kashmir valley. A large number of houses collapsed and thousands were without shelter.

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The devastation was widespread and the standing crops were seriously affected.

With the breaking up of the deep depression on the 20th, the monsoon withdrew from northwest India. It withdrew from Uttar Pradesh by the 24th and from the central parts of the country and northeast India in the course of the next two days. By the 29th, it had withdrawn from the country excepting the extreme south of the Peninsula, from where also it withdrew by the 2nd October.

The total rainfall for the month was in large excess in the Punjab (I), Rajasthan, Gujarat, the Konkan, Deccan (Desh) south Hyderabad, Malabar and South Kanara and Travancore-Cochin, in slight to moderate excess in the Bay Islands, Orissa Madhya Bharat, north Hyderabad and Mysore and normal in Chota Nagpur, west Madhya Pradesh and coastal Andhradesa It was in slight defect in West Bengal, west Uttar Pradesh and Rayalaseema and in moderate to large defect elsewhere Averaged over the plains of India the rainfall was 17% in excess.

Both day and night temperatures were normal throughout the country except in the Punjab (I), Rajasthan, Rayalaseema and Mysore where day temperatures were below normal.

The relative humidity was in excess in west Uttar Pradesh, Rajasthan, Gujarat, Malabar and South Kanara and Mysore and normal elsewhere.

The mean cloud amount was in excess in the Punjab (I), west Rajasthan, Deccan (Desh), Tamilnad, Malabar and South Kanara, and Travancore-Cochin, below normal in Vindhya Pradesh and normal elsewhere.

Data from Jammu and Kashmir are incomplete.

Table I contains the divisional and sub-divisional means of rainfall, temperatures, humidity and cloud amounts for the 13 chief political divisions and the 28 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 8·30 hours I.S.T. of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 8·30 hours I. S. T. of the date given in the succeeding column.

POONA 5,
dated the 9th March, 1951

C. RAMASWAMY,
for Director General of Observatories

	Rainfall				Departure from normal of				
							0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"	"	"		°	°	mb.	%	
1 Assam (including Manipur and Tripura)	7·59	10·91	-3·32	- 30	+1·3	+0·5	+0·5	0	+0·2
2 West Bengal ...	9·52	11·55	-2·03	- 18	+0·6	0	-0·7	-1	+0·3
3 Orissa ...	12·23	9·22	+3·01	+ 33	0	-0·1	-0·1	+2	+0·6
4 Bihar ...	6·24	8·39	-2·15	- 26	-0·5	-0·3	-0·3	-1	-0·1
5 Uttar Pradesh...	4·49	7·05	-2·56	- 36	-0·6	-0·4	+0·4	+3	-0·1
6 Punjab(I)(including PEPSU and Delhi) ...	7·83	4·18	+3·65	+ 87	-3·5	-1·2	+2·1	+2	+1·1
7 Rajasthan ...	6·33	2·62	+3·71	+142	-2·3	-0·3	+1·9	+6	+0·2
Division—*Contd.*									
8 Madhya Bharat and Vindhya Pradesh	6·57	7·58	-1·01	- 13	+0·5	0	+0·2	0	-0·7
9 Madhya Pradesh	6·28	8·12	-1·84	- 23	+0·7	+0·4	+0·3	+1	0
10 Bombay (including Saurashtra & Kutch)	12·18	6·50	+5·68	+ 87	-1·1	+0·5	+1·1	+5	+0·6
11 Hyderabad ...	10·87	7·46	+3·41	+ 46	-0·4	-0·3	+0·5	+5	+0·1
12 Madras (including Travancore-Cochin)	6·32	5·35	+0·97	+ 18	-1·3	0	-0·5	+1	+0·9
13 Mysore ...	7·12	5·60	+1·52	+ 27	-3·1	+0·1	+0·1	+6	+0·9
Mean of India ...	7·87	6·75	+1·12	+ 17	-0·8	0	+0·5	+3	+0·3
Sub-Division									
1 Bay Islands ...	19·47	17·40	+2·07	+ 12	-0·4	+0·9	0	+3	+1·1
2 Assam (including Manipur and Tripura)	7·59	10·91	-3·32	- 30	+1·3	+0·5	+0·5	0	+0·2
3 West Bengal ..	9·52	11·55	-2·03	- 18	+0·6	0	-0·7	-1	+0·3
4 Orissa ...	12·23	9·22	+3·01	+ 33	0	-0·1	-0·1	+2	+0·6
5 Chota Nagpur ...	8·63	7·87	+0·76	+ 10	-0·1	-0·4	-0·3	-1	-0·1
6 Bihar ...	5·29	8·61	-3·32	- 39	-0·7	-0·2	-0·3	0	-0·2
7 Uttar Pradesh, East ...	3·44	7·69	-4·25	- 55	+0·3	-0·3	-0·4	-1	-0·4
8 Uttar Pradesh, West ...	5·54	6·40	-0·86	- 13	-1·5	-0·4	+1·2	+6	+0·2
9 Punjab (I) (including PEPSU and Delhi)	7·83	4·18	+3·65	+ 87	-3·5	-1·2	+2·1	+2	+1·1
10 Jammu and Kashmir	...	...	Data	incom	plete	...	...	...	...
11 Rajasthan, West	2·88	1·10	+1·78	+162	-2·1	+0·1	+2·1	+7	-0·4
12 Rajasthan, East, (including Ajmer)	9·79	4·14	+5·65	+136	-2·4	-0·7	+1·8	+6	0
13 Madhya Bharat	9·56	7·81	+1·75	+ 22	-0·3	+0·4	+0·7	+3	0
14 Vindhya Pradesh	2·59	7·28	-4·69	- 64	+1·7	-0·6	-0·4	-5	-1·6
Sub-Division—*Contd.*									
15 Madhya Pradesh, East	5·22	9·42	-4·20	- 45	+1·0	+0·4	-0·6	-1	-0·1
16 Madhya Pradesh, West	6·94	7·31	-0·37	- 5	+0·5	+0·4	+0·9	+2	+0·1
17 Gujarat ...	15·35	5·39	+9·96	+185	-1·4	+0·5	+1·7	+7	+0·6
18 Saurashtra and Kutch ...	1·84	2·53	-0·69	- 27	-0·8	+0·8	+0·8	+5	+0·2
19 Konkan ...	25·20	10·52	+14·68	+140	-0·7	+0·1	+0·4	+4	+0·2
20 Deccan (Desh)	11·89	7·71	+4·18	+ 54	-1·2	+0·5	+1·1	+5	+1·1
21 Hyderabad, North ...	9·89	8·05	+1·84	+ 23	-0·5	+0·1	+0·6	+5	+0·3
22 Hyderabad, South ...	11·86	6·87	+4·99	+ 73	-0·4	-0·7	+0·5	+4	-0·1
23 Coastal Andhradesa	6·26	5·87	+0·39	+ 7	-1·5	-0·3	-0·5	+2	0
24 Rayalaseema	4·56	5·79	-1·23	- 21	-2·6	0	+1·1	+5	+0·7
25 Tamilnad	2·90	3·95	-1·05	- 27	-0·6	+0·4	-1·4	-2	+1·4
26 Malabar and South Kanara	20·41	9·21	+11·20	+122	-1·8	-0·7	+0·3	+6	+1·3
27 Mysore ...	7·12	5·60	+1·52	+ 27	-3·1	+0·1	+0·1	+6	+0·9
28 Travancore-Cochin	13·07	6·09	+6·98	+115	-1·0	-0·3	+0·3	+5	+1·3

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Andaman Islands																						
Port Blair ...	261	1000·1	-0·6	997·8	82·7	-0·4	87	25.26,29	74·7	+0·9	72	9	79·7	78·1	76·6	75·8	30·0	0	29·1	87	+3	
Assam																						
Dibrugarh ...	348	995·4	-0·8	991·6	86·8	+0·4	96	16	74·6	+0·1	72	5	79·1	80·7	76·8	77·4	30·4	+0·5	30·6	90	+4	
Sibsagar ...	317	996·5	-0·6	992·5	88·6	+1·0	94	15	76·4	+0·2	74	5,6,31	81·2	83·7	77·9	79·3	31·1	-0·4	31·9	86	-1	
Tezpur ...	258	998·3	-1·0	994·2	90·6	+1·8	93	6 days	77·6	+1·1	75	1,2,28	81·5	84·9	78·3	79·5	31·6	+0·3	32·0	86	0	
Gauhati ...	182	1000·5	-0·6	996·3	90·7	+1·3	94	16	76·5	+0·3	74	8,28	83·7	84·1	79·2	78·8	32·1	+0·8	31·2	81	-1	
Dhubri ...	115	1003·2	-0·2	999·4	86·8	+1·1	91	19,21	77·7	+0·4	74	7	82·0	82·2	79·2	78·9	32·5	+1·0	31·9	88	+3	
Silchar ...	96	1003·9	-0·9	999·8	89·6	-0·1	94	10.15,16	77·2	+1·0	73	17	81·7	85·6	78·5	79·9	31·9	+0·3	32·3	87	+3	
Tura ...	1215	965·8	...	962·4	85·4	...	90	11,12,30	74·3	...	71	27,28	79·6	80·4	75·8	76·6	29·2	...	29·5	84	...	
West Bengal																						
Dum Dum ...	33	1004·5	...	1001·2	89·8	...	95	11	78·8	...	75	14,28	84·2	84·4	78·5	78·8	30·6	...	31·0	77	...	
Calcutta ...	21	1004·8	-0·6	1001·5	90·4	+0·5	94	9,10,29	78·8	+0·8	75	14	84·3	85·1	79·6	79·6	32·4	-0·3	32·0	81	-2	
Saugor Island ...	10	1004·7	-0·7	1001·8	87·1	-0·6	91	29	80·0	+0·5	72	26	84·1	83·6	79·6	79·2	32·5	-0·4	32·0	80	-1	
Sandheads ...	32	1004·5	-0·4	1001·6	...	...	...	...	...	...	...	...	84·0	84·6	79·6	79·6	32·6	-0·4	32·3	81	+2	
Midnapore ...	149	1000·3	-0·5	996·9	89·7	0	94	10,11	77·1	-1·0	73	29	83·3	84·7	78·8	78·9	31·6	-0·2	30·8	82	0	
Contai ...	36	1003·7	...	1000·5	87·8	...	92	10,20	78·5	...	72	13	84·3	84·2	79·7	79·5	32·5	...	32·3	81	...	
Burdwan ...	105	1001·7	-0·7	998·2	90·5	+0·5	95	11	78·5	-0·1	74	28	83·3	86·7	78·9	79·2	31·8	-0·6	30·7	81	-2	
Krishnagar ...	48	1004·2	-0·1	1000·6	92·0	+1·9	97	11	77·5	-0·5	73	28	83·6	86·1	79·8	80·4	32·7	-0·3	33·2	84	+3	
Asansol ...	414	991·2	-0·3	987·8	89·7	-0·2	94	12	76·8	-0·2	72	27,28,29	82·8	85·5	78·4	79·1	31·2	-0·8	31·1	81	-2	
Berhampore ...	62	1003·9	-0·3	1000·1	91·5	+1·9	95	10,11,20	79·1	+0·5	75	28	84·4	86·7	79·6	80·2	32·0	-1·0	32·3	80	-2	
Malda ...	103	1002·4	-0·2	999·0	89·5	+0·5	94	26	78·7	+0·4	74	28	84·5	85·4	79·0	80·0	31·3	-1·6	32·6	78	-3	
Cooch Behar ...	145	1002·0	...	998·1	89·1	...	95	12	76·9	...	69	28	82·2	85·0	77·9	79·2	30·6	...	31·4	82	...	
Jalpaiguri ...	271	997·4	-0·4	993·6	...	...	..	...	75·6	-0·3	73	4 days	79·5	85·1	76·6	78·9	29·8	-1·2	31·2	87	0	
Orissa																						
Balasore ...	65	1002·9	-0·6	999·8	88·4	-0·4	93	20,28,29	77·8	-0·2	74	29	82·9	83·9	78·7	78·9	31·9	-0·5	31·5	83	0	
Chandbali ...	20	1004·3	-0·5	1001·3	89·6	+0·8	96	14	78·2	-0·1	73	12	83·4	85·4	79·8	80·3	33·1	+0·6	33·0	85	+2	
Puri ...	20	1004·6	-0·5	1001·7	88·8	+0·2	94	20.29	79·9	+0·2	75	22	84·2	85·0	79·8	80·2	32·6	+0·2	32·7	82	+2	
Cuttack ...	87	1001·9	-1·2	998·8	89·3	-0·7	94	11	77·9	-0·1	74	29	81·6	85·1	77·6	78·5	30·5	-0·8	30·3	83	+3	
Gopalpur ...	56	1003·5	-0·5	1000·5	89·0	+0·4	94	28,29,30	78·4	0	74	29	83·3	84·4	79·3	80·4	32·4	+0·4	33·6	84	+3	
Angul ...	455	990·0	-0·2	986·8	88·2	-0·6	92	8,11,13	76·5	0	71	29	80·2	84·4	76·5	77·3	29·8	-0·6	29·2	84	+2	
Sambalpur ...	486	988·5	-0·9	985·2	89·1	+0·4	95	13	76·3	-0·6	71	26,30	81·5	86·0	77·6	78·9	30·6	+0·3	30·5	83	+1	
Jharsuguda ...	726	980·5	...	977·0	...	...	...	...	...	...	...	...	82·1	83·5	77·5	78·2	30·1	...	30·5	81	..	
Titilagarh ...	691	982·0	...	978·5	90·0	...	95	7.13	75·6	...	71	29	80·7	85·0	75·6	76·5	28·0	...	27·3	78	..	
Chota Nagpur																						
Purulia ...	835	977·6	...	974·0	89·2	...	93	4 days	76·2	...	72	27,29	81·9	84·6	78·2	80·1	31·3	...	33·1	84	..	
Jamshedpur ...	423	990·9	-0·1	987·5	89·8	-0·1	94	10,12	77·2	-0·4	71	27,29	81·7	85·4	77·0	77·8	29·5	-1·0	29·1	80	-	
Chaibasa ...	742	980·1	-0·1	976·6	89·1	-0·2	93	7.8.12	76·0	0	70	29	81·0	84·3	76·6	78·1	29·3	-0·3	30·0	81		
Ranchi ...	2·150	933·7	0	930·9	83·9	-0·2	88	5 days	71·3	-0·6	64	29	77·8	78·3	73·2	72·9	26·1	+0·2	25·5	81		
Hazaribagh ...	2 006	938·2	-0·2	935·5	84·0	-0·7	89	11	71·7	-0·6	64	29	77·9	78·2	73·4	73·3	26·3	+0·3	26·0	81		
Daltonganj ...	725	980·6	-0·4	977·1	89·7	0	94	8	74·7	-0·7	66	29,30	82·8	83·8	76·8	76·8	28·8	0	28·3	75	-	
Dhanbad ...	839	977·0	...	...	88·3	...	93	12	75·0	...	69	27	81·2	...	77·0	...	30·3	...	...	82		
Bihar																						
Purnea ...	124	1001·9	-0·2	998·2	90·3	+1·3	95	31	77·4	0	74	28	83·7	85·0	78·9	80·0	31·3	-1·2	32·7	81	-	

Cloud amount (Oktas)			Rainfall, inches				No of rainy days (0·10 or more)		Wind velocity miles per hour		Wind direction—Number of winds from:—																		STATION
											0830 hrs. I. S. T.										1730 hrs. I. S. T.								
I.S.T.	Departure from normal	Mean 1730 hrs, I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
·3	+1·1	6·9	19·47	+2·07	4·09	2	16	−5·9	9·8	−0·6	0	0	0	0	1	11	15	1	2	0	0	0	0	0	15	13	1	1	**Bay Islands** Port Blair
·6	+0·8	5·4	13·63	−0·22	1·69	5	18	+2·6	1·2	+0·3	7	2	3	0	6	2	1	4	5	2	5	4	0	0	0	0	2	17	**Assam** Dibrugarh
·2	+0·5	5·9	12·68	+0·85	2·14	5	18	+3·2	3·2	+1·4	6	10	1	7	2	3	0	0	1	6	7	3	0	4	2	0	2	6	Sibsagar
·6	−0·2	4·6	4·56	−3·72	2·30	1	6	−6·7	1·4	0	1	5	7	3	1	2	6	0	5	0	0	3	3	0	1	2	0	21	Tezpur
·2	−0·2	4·9	1·36	−5·23	0·62	17	5	−4·3	2·0	+0·7	4	9	2	1	1	2	3	6	2	1	4	1	3	1	9	2	3	6	Gauhati
·3	+0·1	4·9	11·36	−2·66	2·76	5	11	−1·5	2·7	−0·6	4	5	4	4	5	3	0	0	5	1	0	2	2	3	5	2	1	14	Dhubri
·3	+0·5	5·4	10·54	−4·78	3·00	2	10	−6·2	1·1	−0·1	1	2	3	4	3	1	1	0	15	0	0	1	1	1	1	4	3	19	Silchar
·0	...	7·0	11·59	...	2·80	13	15	...	3·2	...	2	0	2	2	4	9	1	1	9	1	4	1	6	2	5	1	1	9	Tura
·3	...	6·0	6·62	...	3·22	12	8	...	5·2	...	2	2	2	6	7	4	1	2	4	0	1	2	8	8	4	1	1	5	**West Bengal** Dum Dum
·6	−0·1	5·9	8·92	−1·03	3·10	12	11	−2·2	2·6	−0·2	0	2	6	4	5	3	2	1	7	0	0	5	3	8	2	2	4	6	Calcutta
·6	−0·5	5·4	12·22	+1·87	2·94	12	12	−0·9	9·8	+1·4	2	2	2	7	5	5	1	5	1	3	2	0	9	9	4	1	2	0	Saugor Island
·5	+0·5	5·3	8·56	+3·77	3·15	12	7	−1·4	...	...	1	1	0	6	6	7	3	3	3	1	1	0	6	8	6	3	2	3	Sandheads
·9	+0·4	5·1	9·48	+0·97	3·38	14	11	−0·9	3·1	+1·2	3	6	2	1	7	1	0	2	8	0	4	1	2	12	2	0	0	9	Midnapore
·8	...	5·8	10·19	...	3·87	13	6	...	6·1	...	1	1	3	6	7	3	0	6	3	2	2	0	9	13	3	0	0	1	Contai
·4	0	5·5	4·18	−4·62	1·08	14	8	−3·3	4·3	+2·5	2	1	7	3	3	7	3	4	0	1	2	4	3	8	4	0	2	6	Burdwan
·8	+0·4	5·7	5·20	−2·76	1·18	13	7	−4·2	2·9	+0·1	1	2	6	1	11	2	4	0	3	0	1	2	9	7	4	1	1	5	Krishnagar
·1	−0·1	5·7	3·40	−4·85	1·24	14	6	−4·7	4·2	+0·2	0	3	3	8	4	1	4	5	2	0	1	4	10	2	0	2	3	8	Asansol
·0	+0·6	5·8	3·96	−5·18	0·90	14	6	−5·5	2·3	−0·2	0	1	4	2	9	0	0	0	14	0	1	6	3	5	1	0	0	14	Berhampore
·4	+1·2	5·3	8·77	−2·75	2·40	1	9	−2·6	3·9	0	4	2	6	5	7	3	1	1	1	2	2	5	6	3	2	3	2	5	Malda
·7	...	6·0	15·53	−7·99	3·51	19	12	−5·1	2·5	...	1	3	8	3	3	2	2	0	8	0	1	1	3	7	4	2	0	12	Cooch Behar
·5	+1·1	4·8	26·92	+5·70	11·74	6	15	−1·4	2·9	+1·4	5	6	9	1	0	1	1	0	7	0	2	6	2	2	5	2	1	10	Jalpaiguri
·8	+1·6	5·9	12·23	+1·17	3·10	23	13	+0·1	4·1	+1·6	8	1	0	5	3	5	1	3	4	0	1	1	12	6	3	0	2	5	**Orissa** Balasore
·5	+1·1	5·8	25·46	+16·54	12·63	14	8	−6·1	4·8	−0·3	3	3	1	6	2	5	2	8	0	2	1	0	13	4	3	4	1	2	Chandbali
·3	+0·6	5·3	6·15	−2·90	1·48	22	10	−2·1	7·9	−0·2	6	2	0	7	3	5	1	6	0	3	1	0	10	6	5	1	3	1	Puri
·5	−0·5	5·4	15·92	+6·16	7·43	22	13	+0·4	3·0	+1·2	2	1	0	0	0	2	2	2	21	0	0	0	2	2	1	0	0	25	Cuttack
·7	+1·5	5·0	3·39 (c)	−4·09	1·38	22	8	−1·5	5·7	−0·8	13	1	1	0	0	3	1	2	9	1	0	5	4	8	6	2	0	4	Gopalpur
·6	+0·2	5·7	5·78	...	...	...	...	...	3·9	+0·1	2	4	2	2	1	1	4	8	6	2	2	2	7	4	1	6	3	3	Angul
·6	−0·4	4·8	10·20	+1·15	4·35	23	7	−4·4	3·2	+0·4	3	9	3	6	2	5	2	0	0	5	3	5	2	4	2	5	4	0	Sambalpur
·6	...	6·7	11·43	...	4·97	23	8	...	...	...	4	1	4	3	0	0	0	0	18	4	0	1	1	2	1	0	0	21	Jharsuguda
·1	...	5·5	9·21	...	4·95	14	8	...	2·0	...	4	4	1	3	6	4	2	2	4	6	5	2	2	1	2	2	2	8	Titilagarh
·2	...	5·8	3·56	...	2·42	14	5	...	3·2	...	4	0	2	10	3	1	5	5	0	2	1	4	11	3	0	1	7	1	**Chota Nagpur** Purulia
·4	−0·3	5·7	9·96	+2·85	5·34	15	8	−3·2	4·3	+1·2	0	1	5	4	0	3	9	3	5	1	1	6	10	1	0	2	3	6	Jamshedpur
·4	+1·3	7·0	8·50	+0·59	1·67	25	10	−1·6	1·4	−0·2	1	3	1	1	0	4	0	1	19	0	5	1	0	1	1	0	0	22	Chaibasa
·4	−1·7	4·8	11·49	+2·19	2·52	19	11	−1·3	3·0	−1·0	4	0	2	1	1	2	0	3	17	5	0	3	3	2	0	1	1	15	Ranchi
·1	−0·5	6·0	7·20	−1·74	1·30	14	11	−0·5	5·4	+0·1	3	2	1	3	2	6	2	10	1	3	3	0	7	2	1	1	9	4	Hazaribagh
·7	+0·2	5·6	4·56	−2·58	1·10	11	7	−2·3	2·3	−0·5	0	5	4	0	0	0	9	1	11	0	6	7	0	1	0	6	2	8	Daltonganj
...	...	...	2·21	...	0·85	1	6	...	4·5	...	0	1	7	1	0	6	2	3	10	...	...	...	...	...	...	...	...	...	Dhanbad
·8	+0·1	5·0	7·18	−4·42	1·45	7,9	11	−0·5	2·6	+0·7	0	2	8	7	1	3	5	3	1	0	1	2	2	0	1	1	0	23	**Bihar** Purnea

(c) Total for 28 days.

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T	Departure from normal Mean 1730
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Bihar (Contd.)																					
Darbhanga ...	161	1000·2	−0·3	996·9	90·3	+1·1	94	12	78·4	−0·1	74	27,28	83·7	87·3	79·6	82·5	32·7	+1·4	35·0	83	+6
Motihari ...	318	998·1	−0·2	994·4	90·2	+0·6	94	12	75·6	−1·4	69	27,28	84·2	84·5	79·0	79·2	31·5	−0·3	31·6	79	−1
Patna ...	173	999·4	−0·4	996·1	90·4	+0·7	95	12	78·8	−0·1	74	27,28	84·8	86·0	78·9	78·5	30·9	−1·2	29·9	76	−3
Dehri ...	352	992·9	...	989·7	90·3	...	94	6,12	77·7	...	71	29,30	82·7	85·4	77·5	78·9	29·9	...	30·8	80	...
Gaya ...	365	992·6	−0·3	989·3	90·3	−0·2	95	6	77·5	+0·4	71	28	83·7	85·9	78·3	78·9	30·3	−0·1	30·6	78	+3
Dumka ...	489	988·8	−0·5	985·3	90·4	+1·3	94	11,12,26	...	...	...	...	82·9	84·7	77·6	77·5	29·6	−1·4	29·3	78	−3
Sabour ...	122	1001·4	+0·3	997·7	90·1	+0·8	94	26	78·2	−0·1	72	29	84·2	85·2	79·6	80·1	32·4	−0·2	32·7	82	−1
U. P., East																					
Gonda ...	360	993·3	...	989·8	91·2	+0·1	94	6 days	75·6	−1·5	66	29	81·9	86·1	74·0	77·5	25·1	−5·9	28·3	79	−2
Gorakhpur ...	254	996·2	−0·8	993·6	91·1	+0·7	95	27	77·5	+0·3	69	30	85·8	87·5	77·6	78·2	30·0	−1·1	28·8	78	−3
Azamgarh ...	255	996·4	...	993·4	91·8	...	96	12	76·0	...	66	29	81·6	86·4	78·3	79·4	31·9	...	31·1	85	...
Banaras ...	250	996·7	−0·1	993·1	91·9	+0·9	98	12	76·7	−0·6	68	29,30	82·9	88·0	78·0	78·6	30·5	−0·4	29·2	80	0
Allahabad (Bamrauli) ...	322	994·1	−0·3	991·0	92·0	+0·5	96	12	76·5	−0·1	68	29	83·0	87·9	78·4	79·3	31·1	+0·6	30·4	81	+2
Fatehpur ...	375	992·4	...	989·2	91·4	+0·3	97	7	76·4	−0·3	68	29	82·1	86·6	77·5	78·8	30·1	−0·9	30·1	80	+1
Banda ..	398	992·4	...	988·2	92·4	...	97	1,8,30	76·6	...	70	28,29	82·8 (b)	88·3	77·3	78·5	29·2 (b)	...	29·1	76 (b)	...
Kanpur ...	414	990·9	−0·2	987·7	91·6	+0·7	97	7	76·4	+0·2	68	28,29	82·5	85·0	76·9	77·8	29·2	−0·5	29·6	74	−8
Lucknow ...	371	992·6	0	986·2	91·4	−0·5	96	29	76·5	0	69	29	80·4	87·1	76·8	78·2	29·9	−0·2	28·7	84	+5
Bahraich ...	407	991·7	+0·3	988·6	91·2	0	95	13	76·1	−0·4	67	27	82·1	86·1	77·2	78·3	29·6	−0·3	29·0	79	+1
U. P., West																					
Jhansi ...	823	977·1	−0·7	973·7	91·4	−0·3	97	7,11	75·3	−0·1	72	22,28	80·5	88·0	75·4	77·1	27·2	+0·1	26·6	78	+4
Agra ...	553	986·0	−0·4	983·4	90·4	−2·5	96	9	76·1	−0·1	70	19	79·6	87·3	75·7	77·0	28·4	+1·0	27·1	83	+8
Mainpuri ...	516	987·4	+0·2	983·1	90·9	−2·0	96	9	75·7	+0·1	70	26,28	81·1	86·0	78·2	80·4	31·4	+3·3	33·1	87	+11
Aligarh ...	615	984·3	..	981·3	90·5	−1·8	97	7	75·0	−0·9	68	28	80·4	85·9	77·1	78·6	28·6	+2·8	29·9	84	+13
Bareilly ...	568	985·6	−0·5	982·5	90·2	−0·7	95	13	74·8	−0·9	67	27,28,29	81·4	85·1	76·4	77·1	28·8	−0·1	28·1	79	−1
Meerut ...	728	980·2	−0·3	...	89·5	−2·3	96	13	74·2	−0·4	67	27	80·0	...	75·6	...	28·1	+1·7	...	81	+5
Roorkee ...	899	974·4	−0·5	971·2	89·2	−1·3	95	13	72·5	−0·6	63	26,27	78·1	87·4	74·2	77·3	26·9	+0·2	27·1	83	+4
Dehra Dun ...	2,239	930·7	0	928·4	83·9	−1·0	88	12,13	69·0	−0·5	62	27,28,30	74·8	80·8	70·8	73·8	24·0	+0·4	25·4	82	+2
Punjab (I)																					
New Delhi ...	710	980·7	−0·4	977·9	91·2	−2·3	96	8,9,13	75·2	−0·3	69	27,28	80·7	86·3	75·3	76·8	27·7	+1·7	26·9	77	+6
Hissar ...	725	980·2	−0·2	977·6	93·7	−3·0	101	14	73·5	−1·0	66	27,30	78·2	88·1	74·6	78·2	27·6	+3·4	28·2	84	−19
Karnal ...	818	976·9	...	974·2	88·4	...	95	30	74·0	...	69	20	78·2	85·2	74·8	76·9	27·9	...	27·8	84	...
Amba a ...	892	974·1	−0·8	971·6	90·3	−3·7	98	2	72·7	−1·2	66	27	77·2	85·9	73·9	77·8	26·6	+0·7	29·5	85	+11
Patiala ...	822	976·8	...	974·1	89·7	...	95	11,12,13	72·9	...	65	28	78·2	84·7	74·4	76·1	26·9	...	27·3	83	...
Ludhiana ...	810	977·6	0	975·0	90·0	−4·9	98	13	72·7	−2·1	65	26	78·6	86·3 (b)	74·7	76·1 (b)	27·7	+2·5	26·3 (b)	83	+11
Ferozepore ...	657	982·5	...	979·2	89·3	...	98	1,18	72·9	...	67	20,28	79·9	85·1	75·4	79·6	28·1	...	31·9	84	...
Amritsar ...	769	978·7	...	976·5	87·2	...	95	2,11	72·7	...	66	20	78·1	83·4	74·6	75·9	27·6	...	26·7	85	...
Jammu & Kashmir																					
Srinagar ...	5,205	841·2	+1·0	838·3	74·1	−9·4	88	12	53·3	−0·2	41	20	59·3	68·7	56·3	59·0	14·2	−0·9	14·0	84	−1
Gulmarg ...	8,709	739·8	−0·3	...	58·2	−5·3	67	2	40·3	−2·8	31	29	47·5	...	45·5	...	9·9	−0·4	...	87	+7
Dras (R) ...	10,059																				
Leh ...	11,529	667·3	−0·2	665·0	52·9	−6·8	78	1	39·6	−2·2	30	28	47·6	59·3	39·5	45·5	5·4	−1·1	6·6	52	+2
Skardu (R) ...	7,505																				
Gilgit (R) ...	4,890																				
Miagar (R) ...	10,190																				

(b) Mean for 29 days (R) Register not received.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from:—																	STATION
											0830 hrs. I S T.									1730 hrs. I S T.								
Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bihar *(Contd.)*
4·4	−0·3	4·3	1·77	−7·47	0·83	1	5	−4·4	2·6	0	0	10	7	1	0	0	5	2	5	0	1	4	0	0	1	0	1	23	Darbhanga
4·5	+0·6	2·7	6·23	−2·82	1·80	6	8	−1·1	2·9	−0·1	1	1	14	3	0	0	4	0	7	0	0	5	0	0	0	1	0	24	Motihari
3·8	−1·1	4·9	7·04	−1·56	2·99	13	11	+1·8	4·7	+1·4	3	5	3	5	2	2	5	3	2	1	6	3	5	2	4	1	7	1	Patna
4·1	...	5·6	7·00	−0·39	3·93	1	5	−3·9	3·1	...	1	0	4	6	0	5	2	6	6	1	4	7	0	0	0	0	11	7	Dehri
3·7	0	5·4	6·88	−0·62	3·07	1	8	−1·3	5·3	+0·8	0	3	5	3	1	7	4	2	5	3	4	8	0	0	1	11	1	2	Gaya
2·5	−2·2	3·5	6·64	−2·95	2·24	14	8	−4·5	...	...	0	1	6	8	2	4	6	3	0	0	1	6	11	1	1	6	3	1	Dumka
5·4	−0·3	6·1	2·72	−5·64	1·07	7	5	−4·8	4·9	+0·4	0	1	8	4	2	6	7	1	1	1	3	7	5	0	1	5	3	5	Sabour
																													U. P., East
3·1	−1·1	2·8	2·75	−6·39	1·66	2	6	−4·2	3·7	+0·6	1	0	8	2	0	1	7	3	8	1	0	6	2	0	0	3	5	13	Gonda
3·2	−0·2	2·3	6·12	−2·40	3·24	6	7	−2·3	3·3	+1·6	0	1	11	2	0	0	9	0	7	0	2	5	0	1	0	9	0	13	Gorakhpur
3·1	...	3·8	2·11	...	0·66	1	6	...	...	...	0	0	10	0	1	4	2	0	13	0	0	4	0	0	0	5	0	21	Azamgarh
3·3	−0·9	3·7	3·88	−3·34	1·60	1	6	−2·7	5·7	+2·9	1	1	6	3	2	8	6	0	3	1	1	7	2	0	3	5	8	3	Banaras
3·7	−0·8	4·5	3·97	+4·56	1·62	1	6	−3·5	3·8	+0·1	2	3	4	3	0	4	9	0	5	3	2	5	0	0	3	6	5	6	Allahabad (Bamrauli)
2·5	−1·2	3·4	3·58	−1·93	0·79	15	7	−1·6	3·2	+0·5	0	0	7	2	1	1	8	3	8	0	0	6	0	0	0	1	0	23	Fatehpur
2·0	...	3·6	4·18	...	2·50	8	7	...	2·6	...	1	1	4	4	1	4	10	1	4	0	5	5	0	0	1	7	4	8	Banda
2·9	+0·3	3·4	1·47	−5·32	0·90	16	3	−4·3	6·4	+1·3	2	2	6	1	2	2	10	1	4	1	2	4	4	0	0	1	5	13	Kanpur
3·5	−0·1	3·6	3·05	−4·35	0·61	1	5	−2·9	2·7	+1·0	1	2	6	7	3	2	6	1	2	3	2	6	1	1	1	6	4	6	Lucknow
3·7	+0·9	3·4	2·67	−5·91	1·05	18	7	−0·3	4·1	+2·1	2	0	7	7	0	0	4	4	6	1	2	2	4	0	3	3	1	14	Bahraich
																													U. P., West
2·3	−0·6	2·7	3·55	−2·35	1·37	15	6	−1·0	4·1	+1·1	2	2	2	0	1	3	8	2	10	1	4	4	0	0	4	4	4	9	Jhansi
3·6	+0·5	2·9	6·83	+2·25	1·71	2	9	+3·4	2·9	−0·5	0	0	5	0	0	0	0	0	25	1	1	2	0	2	0	1	3	20	Agra
3·6	+0·2	3·7	4·45	−0·64	1·05	8	7	+0·6	2·5	+0·8	0	1	3	5	1	2	6	3	9	0	1	2	6	2	0	7	5	7	Mainpuri
3·6	+1·0	4·0	6·56	+1·26	1·95	2	10	+3·9	4·7	+0·8	0	0	7	2	0	0	4	3	14	1	1	5	2	0	0	1	5	15	Aligarh
3·3	+0·5	4·1	5·76	−1·74	1·05	9	10	+3·2	3·2	+1·6	2	1	6	4	1	1	8	2	5	1	0	4	1	0	0	12	2	10	Bareilly
2·9	−0·1	...	5·53	−0·33	1·90	20	10	+4·9	4·6	...	0	0	8	5	0	0	1	4	12	...	...	...	...	...	...	...	...	...	Meerut
2·7	−0·2	2·9	5·92	−0·45	2·28	20	7	+1·0	3·0	+1·3	0	2	0	14	0	0	0	4	10	0	2	0	8	0	1	0	7	12	Roorkee
4·1	+0·3	3·8	5·76	−4·86	1·64	9	11	+0·1	1·5	−0·1	2	1	1	0	1	3	2	1	19	0	1	0	1	0	4	4	2	18	Dehra Dun
																													Punjab (I)
4·0	+1·4	4·4	6·92	+2·08	1·51	20	10	+5·4	6·0	...	0	2	5	3	2	4	8	3	3	1	2	5	3	0	2	3	7	7	New Delhi
2·0	+0·4	2·8	1·88	−0·93	0·68	6	4	+0·9	4·4	+0·3	1	4	4	4	5	6	1	1	4	7	3	1	3	1	2	4	8	1	Hissar
3·3	...	3·3	8·29	...	4·63	3	7	...	3·1	...	3	4	2	6	1	0	1	7	6	1	2	3	3	0	1	5	12	3	Karnal
3·8	+1·3	2·7	9·79	+4·68	2·95	3	9	+4·3	4·8	+2·6	0	0	4	4	1	0	1	4	16	0	0	3	7	0	0	3	6	11	Ambala
3·5	...	3·6	8·43	...	2·62	3	8	...	4·9	...	5	1	1	13	1	0	0	5	4	7	1	3	6	0	1	2	7	3	Patiala
2·9	+1·1	3·5	12·75	+8·80	3·62	17	7	+3·2	2·1	+0·9	0	2	3	4	1	1	3	3	13	0	1	3	5	1	0	2	5	13	Ludhiana
3·6	...	3·2	17·54	...	7·23	4	7	...	1·3	...	2	2	1	2	1	3	2	0	17	2	9	1	4	0	0	0	3	11	Ferozepore
3·4	...	3·0	14·35	...	4·45	3	5	...	6·5	...	2	5	6	3	3	3	1	2	5	8	4	4	2	0	1	4	6	1	Amritsar
																													Jammu & Kashmir
3·6	+1·3	4·1	4·56	+3·03	1·54	19	5	+1·5	2·2	0	0	0	3	10	0	1	2	3	11	1	1	0	10	2	4	1	2	9	Srinagar
3·9	+1·7	...	7·80	+5·18	3·16	20	9	+3·7	3·3	+0·4	1	2	1	1	3	9	3	1	9	...	...	..	...	...	...	...	...	...	Gulmarg
																													Dras (R)
3·9	+1·0	4·1	2·64	+2·37	0·98	18	6	+5·1	3·2	+1·4	0	2	0	1	2	2	0	0	23	0	2	0	2	0	10	8	1	7	Leh
																													Skardu (R)
																													Gilgit (R)
																													Miegar (R)

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure from normal	Mean 1730
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
Rajasthan, West																						
Sri Ganganagar ...	580	985·0	...	982·2	92·7	−7·3	100	9,14	73·4	−0·7	65	28	79·7	87·9	74·7	77·8	27·3	+4·4	28·0	78	+18	6
Bikaner ...	734	979·3	−1·0	976·9	95·7	−1·7	103	8	76·6	−0·5	68	30	81·4	92·3	73·7	75·2	24·7	+0·3	21·9	68	0	4
Jaisalmer ...	793	977·1	...	973·8	99·4	...	105	7,8	77·2	...	72	28	80·5	96·2	...	...	...	...	...	...	...	.
Jodhpur ...	736	980·1	+0·3	977·1	94·0	−0·2	100	1,2	75·4	+0·6	68	30	79·8	89·2	74·1	74·8	26·2	+1·3	22·9	75	+2	5
Phalodi ...	783	978·3	...	974·9	96·8	...	103	7	76·7	...	72	29	80·2	91·3	75·3	79·2	27·4	...	28·4	79	...	5
Barmer ...	638	983·5	−0·2	980·1	95·9	+0·7	101	1	76·8	+1·1	72	1,29	81·3	92·6	75·8	78·6	27·7	+2·5	24·6	77	+6	5
Rajasthan, East																						
Sikar ...	1419	956·8	...	954·4	90·9	...	96	4 days	72·8	...	62	30	78·4	85·3	73·1	74·2	25·5	...	23·9	78	...	6
Jaipur ...	1431	956·9	−1·3	954·2	88·9	−4·2	96	9	72·7	−0·1	65	30	79·2	84·7	73·7	74·9	25·9	+2·0	24·4	76	+6	6
Ajmer ...	1593	951·3	−1·5	947·6	87·4	−2·6	94	7	73·1	−1·4	61	30	78·0	83·3	74·7	73·7	28·0	+4·0	24·0	76	+9	6
Kotah ...	843	975·9	−1·5	973·4	89·8	−2·5	95	7,10	76·0	−0·4	72	21,30	80·2	86·5	75·2	76·8	27·6	+2·0	27·1	78	+9	6
Jhalawar ...	1053	968·7	−1·3	966·0	88·4	−1·0	94	7,8	73·4	+0·1	69	5 days	78·3	85·1	74·3	75·2	26·9	−0·3	25·1	83	+2	6
Udaipur ...	1910	941·3	−1·7	939·1	86·0	−1·6	90	4 days	69·6	−1·6	60	30	76·3	81·2	71·9	72·9	25·0	+1·3	24·1	80	+5	6
Madhya Bharat																						
Gwalior ...	681	981·3	...	978·5	91·0	...	95	7 days	76·2	...	72	29,30	82·1	86·8	75·9	77·2	27·7	...	27·5	75	...	(
Guna ...	1571	951·7	−1·0	949·5	88·0	+0·9	93	15	71·7	+0·2	66	26,27	77·3	83·6	73·1	74·1	26·1	−0·4	24·9	82	−1	(
Neemuch ...	1621	950·8	−1·3	948·5	85·8	−2·1	91	11,12,28	71·6	+0·4	67	18,23,30	76·1	81·4	73·3	73·9	26·9	+2·0	25·5	88	+9	7
Ratlam ...	1596	952·1	...	949·5	84·1	...	90	26	71·8	...	66	21	74·0	80·3	72·4	75·7	25·3	...	28·2	92	...	
Indore ...	1839	943·8	−1·5	941·1	84·1	−1·3	91	28	70·3	+0·8	64	21	74·6	80·1	72·1	73·3	25·9	+0·6	25·2	87	+4	
Bhopal ...	1643	950·1	−0·7	947·2	87·0	+1·1	93	12	72·4	+0·3	69	22,24	76·8	83·6	72·4	74·3	25·8	+0·6	25·2	80	−1	(
Bairagarh ...	1714	947·8	−0·6	944·8	86·5	+0·6	91	4 days	71·1 (b)	−0·3	67	22	76·1	82·1	72·4	73·5	25·5	−0·4	24·3	83	0	
Madhosagar ...	757	979·0	...	976·1	90·2	...	96	7	76·6	...	72	19	81·2	87·4	75·7	77·2	27·9	...	27·2	77	...	
Vindhya Pradesh																						
Nowgong ...	750	979·8	−0·4	976·3	91·3	+1·0	96	7,30	74·2	−0·6	68	28	81·9	87·7	76·1	76·8	28·1	−0·2	26·5	75	−6	
Sutna ...	1041	969·3	−0·8	966·3	90·2	+2·0	94	7,9,10	74·5	−0·3	67	28	81·3	86·3	75·6	76·3	28·1	−0·1	26·8	76	−4	
Umaria ...	1506	954·3	...	951·4	88·5	+2·1	93	7	72·3	−0·8	65	30	79·9	84·4	73·9	76·2	26·1	−0·8	27·5	76	−4	
Madhya Pradesh East																						
Gondia ...	1026	970·8	...	967·5	88·5	...	92	4 days	74·3	...	71	29,30	79·7	85·3	75·4	76·7	28·1	...	27·5	81	...	
Pendra ...	2040	937·0	−0·4	934·3	84·4	+0·8	90	12	71·0	+0·5	66	29	76·8	80·8	72·5	73·6	25·6	−0·2	25·6	81	−1	
Champa ...	805	978·2	...	974·5	89·8	...	94	7	76·4	...	70	29,30	81·0	87·1	76·0	77·4	28·4	...	27·7	79	...	
Raipur ...	979	972·1	−0·6	968·7	88·9	+0·8	93	28	75·6	+0·6	70	30	80·6	85·8	75·1	75·8	27·3	−1·4	26·0	77	−4	
Kanker ...	1318	961·3	−0·1	957·9	86·8	+0·9	91	10,12	73·3	+0·4	66	30	78·9	84·1	74·8	76·8	27·6	+0·4	28·2	82	0	
Chanda ...	634	984·4	−0·8	980·3	90·5	+1·6	95	16	74·5	0	70	27	79·7	86·5	74·8	75·6	27·4	−0·8	27·1	79	−1	
Jagdalpur ...	1815	944·7	−0·8	941·5	85·5	+0·8	90	7,13	71·0	+0·5	64	30	76·0	81·3	73·1	74·1	26·6	−0·9	25·8	86	+2	
Madhya Pradesh West																						
Buldhana ...	2133	934·6	...	932·0	82·3	...	88	27,28	70·5	...	66	18,19	72·5	78·0	70·4	72·6	24·6	...	25·1	90	...	
Akola ...	925	974·5	−1·3	970·8	89·1	−0·3	96	28,30	74·1	+1·0	69	18	77·5	85·7	74·0	76·0	27·1	+1·7	26·3	85	+7	
Amravati ...	1213	964·8	−0·7	961·3	88·1	−0·1	95	29,30	73·5	+1·0	69	18	77·4	85·9	73·1	74·1	25·9	+0·2	23·4	81	+1	
Yeotmal ...	1481	956·0	...	952·6	87·6	...	93	28,29	71·7	...	68	18	77·1	83·3	73·3	74·8	26·3	...	25·6	83	...	
Khandwa ...	1044	970·2	−1·5	967·1	87·2	−1·2	94	27,28	72·4	−0·6	69	14,19	77·8	82·5	74·6	75·7	27·8	+2·1	27·3	86	+5	
Hoshangabad ...	992	971·6	−1·6	968·5	89·4	+2·7	95	29	73·5	+0·2	69	28	77·9	85·8	74·5	77·6	27·6	+0·4	28·6	85	0	
Sagar ...	1808	944·3	−0·8	941·5	86·3	0	91	7	72·0	+0·6	69	4 days	76·7	82·5	72·3	73·3	25·2	+0·2	24·3	81	+1	
Jabalpur ...	1289	961·7	−0·4	958·4	89·1	+2·0	94	8	73·2	+0·9	68	28,29,30	80·1	86·1	74·5	76·0	26·7	+0·3	26·1	76	−5	
Seoni ...	2027	937·4	−0·7	934·4	85·6	+0·6	90	11,12	71·1	+0·7	68	25,26	76·3	82·7	72·0	72·8	25·1	+0·2	23·5	81	+2	

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
0830 hrs. I.S.T	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Rajasthan, West
1·8	+1·1	2·4	4·65	+4·53	1·23	4	7	+6·5	3·5	−2·1	2	2	6	3	4	5	1	1	6	6	5	2	3	0	2	1	3	8	Sri Ganganagar
1·8	+0·3	2·7	1·19	−0·12	0·54	4	4	+1·9	5·0	−0·4	1	6	0	3	0	18	0	2	0	0	9	0	3	0	10	0	8	0	Bikaner
2·3	...	3·8	0	...	0	...	0	...	11·0	...	6	2	0	0	1	21	0	0	0	2	7	0	0	1	16	2	2	0	Jaisalmer
3·6	+0·4	4·7	2·54	+0·14	1·03	7	5	+2·2	4·4	−2·9	3	1	0	0	0	11	12	0	3	4	5	2	2	3	9	4	1	0	Jodhpur
3·2	...	4·1	1·92	+0·97	0·62	18	6	+4·3	9·2	...	5	0	0	0	4	16	3	0	0	6	2	2	2	3	11	2	2	0	Phalodi
2·5	−0·1	3·9	4·13	+3·40	1·55	7	6	4·6	6·4	+0·7	2	0	0	0	2	10	10	4	2	1	1	0	5	8	7	1	2	5	Barmer
																													Rajasthan, East
3·5	...	4·6	3·43	...	0·75	11,19	6	...	5·6	...	2	1	1	2	3	6	8	1	6	0	2	4	1	0	6	6	3	8	Sikar
3·0	+0·2	4·5	7·22	+4·00	1·83	9	10	+5·3	4·9	+0·9	7	3	1	3	1	2	1	7	5	1	3	5	2	2	1	4	7	5	Jaipur
3·0	+0·2	4·4	8·43	+5·73	3·09	19	8	+4·0	5·1	+1·0	0	4	0	2	2	7	10	0	5	3	4	1	0	1	5	5	2	7	Ajmer
3·2	+0·2	4·0	3·19	+3·48	1·83	16	9	+3·3	3·8	+1·2	1	3	2	0	1	2	5	6	10	0	2	1	0	2	0	2	4	19	Kotah
3·1	−0·7	4·1	8·63	+2·40	2·64	2	11	+4·1	4·2	+1·1	1	1	0	3	2	3	5	5	10	5	5	3	1	1	1	2	7	5	Jhalawar
3·6	+0·7	5·2	16·47	+12·62	7·24	18	9	+3·6	2·6	...	2	0	0	1	3	3	4	7	10	2	1	1	5	4	5	5	4	3	Udaipur
																													Madhya Bharat
3·2	...	4·5	4·91	...	2·00	1	6	...	3·3	...	1	1	2	5	1	3	9	6	2	4	5	1	4	1	2	3	6	4	Gwalior
3·7	0	5·3	3·43	−5·98	1·86	16	6	−2·6	4·8	+0·9	1	1	1	2	4	4	9	5	3	7	2	2	3	4	0	4	8	0	Guna
4·7	+1·1	5·2	15·60	+10·63	4·00	1	12	+5·7	5·7	−0·3	2	4	0	0	0	6	10	8	0	4	5	1	0	0	7	6	4	3	Neemuch
6·3	...	6·9	20·82	...	10·05	17	14	...	5·0	...	2	0	0	0	0	7	11	8	2	2	1	0	0	0	6	16	5	0	Ratlam
5·3	−0·1	6·2	12·46	+6·00	3·31	17	12	+3·6	7·2	−0·1	4	1	0	0	1	4	6	14	0	6	1	0	0	3	4	7	8	1	Indore
3·7	−0·9	5·2	6·76	−3·66	1·64	16	10	−0·2	4·8	+0·3	3	1	1	2	3	3	8	8	1	3	3	1	2	3	4	4	9	1	Bhopal
4·5	−0·1	5·2	6·16	−4·26	1·88	16	11	+0·8	6·4	−0·1	10	1	1	1	4	3	2	6	2	7	4	2	0	1	6	3	5	2	Bairagarh
3·0	...	4·4	5·13	...	1·95	16	7	...	6·9	...	1	2	2	3	3	1	11	5	2	5	5	3	2	3	0	5	6	1	Madhosagar
																													Vindhya Pradesh
2·5	−1·5	3·8	2·43	−3·38	1·03	15	5	−2·2	2·8	+1·0	2	3	2	0	1	15	2	2	3	5	7	2	2	3	3	4	3	1	Nowgong
2·2	−1·9	2·5	1·56	−5·33	0·47	6	5	−3·9	3·6	+0·3	3	2	0	0	5	4	9	2	5	2	2	2	1	0	7	3	5	8	Sutna
3·8	−1·4	4·9	3·78	−5·35	1·00	16	8	−2·4	2·5	−0·7	1	2	2	1	1	2	1	8	12	1	2	2	2	0	3	3	3	14	Umaria
																													Madhya Pradesh East
2·9	...	3·5	3·68	...	1·88	2	6	...	3·0	...	9	5	0	2	3	4	2	4	1	4	1	0	1	1	4	0	3	16	Gondia
3·9	−0·4	5·2	5·19	−2·71	1·92	15	7	−4·3	3·8	+0·6	6	2	1	3	9	0	2	7	0	11	2	0	2	6	2	2	4	1	Pendra
4·5	...	5·2	7·59	...	3·51	15	9	...	4·2	...	9	3	4	4	3	1	2	4	0	6	4	5	1	0	3	3	5	3	Champa
5·6	+1·0	5·5	5·89	−1·80	1·85	14	5	−5·3	4·0	−0·7	6	2	0	1	2	5	3	3	8	5	5	1	2	2	2	3	1	9	Raipur
4·6	−1·0	5·3	4·99	−5·25	1·57	15	9	−3·3	3·0	−0·6	0	0	0	0	0	2	3	0	25	0	1	1	0	0	0	5	1	22	Kanker
4·3	−0·3	5·0	6·76	−2·15	2·72	14	6	−4·7	3·8	−0·3	0	0	0	0	0	10	2	6	12	0	2	2	5	1	4	1	3	12	Chanda
5·2	+0·2	5·7	3·29	−7·09	0·88	15	9	−4·6	3·3	+0·9	0	3	0	1	0	6	1	9	10	0	4	0	0	0	11	0	6	9	Jagdalpur
																													Madhya Pradesh West
6·3	...	6·1	10·37	...	2·07	5	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Buldhana
5·8	+1·0	5·6	4·87	−0·93	1·99	8	7	−0·6	5·4	+0·5	0	0	0	0	0	3	14	13	0	2	3	1	0	2	3	5	12	2	Akola
5·1	+0·2	5·4	3·27	−2·77	1·10	6	5	−3·3	5·7	+1·4	0	3	0	0	0	17	0	10	0	0	9	0	4	0	8	0	9	0	Amravati
4·8	...	5·1	3·31	...	1·90	5	6	...	6·8 (c)	...	2	1	0	1	0	9	1	16	0	4	6	0	4	2	5	3	6	0	Yeotmal
5·9	+1·5	6·3	14·99	+9·30	3·66	16	11	+3·9	5·1	+0·1	0	0	0	0	2	3	16	6	3	6	0	0	0	0	7	5	11	1	Khandwa
5·6	+0·6	5·2	15·04	+6·68	8·15	16	8	−1·5	2·5	+0·4	1	0	0	0	1	5	3	3	17	0	1	1	0	1	3	2	1	21	Hoshangabad
3·7	−0·5	4·4	4·65	−2·95	2·08	15	9	−0·6	9·0	−0·5	3	2	1	2	3	3	7	7	2	2	6	0	4	1	4	3	9	1	Sagar
3·7	−0·8	4·1	2·79	−5·62	0·93	15	6	−3·7	2·9	+0·7	2	0	2	7	7	2	3	1	6	3	6	3	5	1	2	1	6	3	Jabalpur
3·6	−0·7	3·6	6·50	−2·09	2·52	16	9	−1·9	4·3	+1·3	4	4	0	1	3	3	1	1	13	12	1	2	5	4	3	0	0	3	Seoni

(c) Mean for 28 days (b) Mean for 29 days

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M.

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hours I.S.T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Madhya Pradesh West (Contd.)																					
Chhindwara ...	2,248	930·5	...	927·7	85·2	...	90	8	69 8	...	66	4 days	75·8	81·7	71·3	72·1	24·3	...	23·0	80	...
Betul ...	2,144	934·2	...	931·3	83·4	...	88	8	69·0	...	64	25	75·0	79·5	71·1	72·3	24·4	...	24·2	82	...
Nagpur ...	1,010	971·3	−0·8	967·1	89·8	0	96	8	73·3	−0·9	70	27.29	79·6	86·0	74·7	76·0	27·1	+2·1	26·1	80	+8
Gujarat																					
Deesa* ...	466																				
Surat ...	39	1006·0	−0·8	1003·0	88·0	−0·7	96	27	76·3	+0·4	75	6 days	79·3	85·5	77·0	78·9	30·6	+1·6	30·8	86	+5
Ahmedabad ...	163	1000·8	−1·4	997·4	90·3	−2·3	96	11	76·9	+0·9	74	1	78·9	88·4	76·1	78·7	29·5	+2·2	29·1	88	+1
Dohad ...	1,093	968·9	...	966·1	85·1	−1·0	95	13	72·8	−0·1	64	1	76·0	82·4	73·9	76·0	27·7	+0·7	27·7	90	+4
Baroda ...	115	1002·5	...	999·4	89·0	−1·6	94	2,7,28	75·4	+0·8	72	2,30	78·6	85·5	76·8	78·9	30·7	+2·4	30·8	92	+1
Saurashtra & Kutch																					
Bhuj ...	343	994·7	−0·6	991·7	91·3	−0·5	96	17	75·8	+1·1	72	4 days	79·3	88·6	75·0	75·8	27·9	+0·9	25·2	81	+5
Dwarka ...	37	1005·6	−0·8	1003·4	85·8	+0·6	88	1.12,13	78·3	+0·6	76	30	80·1	83·0	76·5	77·5	29·5	+0·5	29·7	85	0
Jamnagar ...	60	1004·7	−0·7	...	88·2	−1·2	92	5	75·2	+0·7	70	30	80·7	...	77·0	...	30·0	+1·7	...	84	+5
Rajkot ...	432	991·6	−1·1	988·3	91·0	−0·8	94	27,30	74·0	+1·4	68	29	77·7	80·2	74·2	75·1	27·3	+0·5	23·8	84	+3
Veraval ...	26	1006·3	−1·1	1003·9	85·1	...	87	5 days	76·2	...	70	29 30	79·5	82·3	76·9	78·5	30·4	...	31·5	88	+4
Bhavnagar ...	55	1004·9	−1·0	1001·7	90·3	−2·1	94	4 days	75·2	+0·3	72	30	78·3	86·4	75·1	77·8	28·3	+0·4	28·6	86	+11
Konkan																					
Dahanu ...	15	1006·7	...	1004·4	83·2	...	87	27,28	76·6	...	72	17	79·2	82·9	76·4	77·6	29·8	...	29·9	88	...
Bombay ...	35	1006·7	−1·0	1004·2	85·6	+0·1	89	27,28	76·2	+0·5	72	5	80·0	81·6	76·9	77·3	30·2	+0·7	30·1	87	+2
Alibag ...	23	1007·8	−0·5	. .	83·8	−0·8	88	30	76·1	+0·1	73	5	78·7	...	76·5	...	30·2	+0·9	...	90	+7
Harnai ...	66	1006·4	...	1004·0	82·2	...	85	11,12	75·8	...	71	2	78·1	79·8	75·4	76·2	29·1	...	29·9	88	...
Devgad ...	117	1004·7	...	1002·3	82·9	...	86	25	75·0	...	71	8	76·5	80·3	75·3	77·6	29·4	...	31·1	95	...
Vengurla ...	29	1008·0	...	1005·6	83·2	...	88	27,29	74·0	...	71	8	77·4	79·2	75·3	76·2	29·0	...	29·5	90	...
Marmagao ...	202	1001·9	−1·0	999·6	81·4	−1·3	84	1,28,29	74·4	−0·3	71	9	77·3	78·6	75·0	75·8	28·6	−0·5	29·2	90	+3
Honavar ...	85	1006·9	...	1004·4	82·5	...	87	28,29	73·5	...	69	7	76·9	78·9	75·3	76·1	29·2	...	29·5	93	...
Deccan (Desh)																					
Jalgaon ...	660	983·4	...	981·1	89·4	...	95	8,27	73·8	...	69	19	77·4	84·9	74·6	76·2	28·0	...	26·9	87	...
Malegaon ...	1,432	958·5	−1·0	954·8	87·0	−1·7	92	27	71·8	+1·6	67	19	77·0	81·1	72·7	73·9	25·5	+1·6	25·3	80	+4
Deolali ...	1,874	944·0	...	...	81·9	...	88	28	70·4	...	68	25	73·5	...	70·7	...	24·6	...	...	86	...
Ahmednagar ...	2,154	934·9	−1·1	931·8	84·8	−1·3	90	9,11,27	69·1	+1·2	65	18,19,20	73·7	79·9	70·2	71·7	23·8	+1·3	23·2	84	+6
Poona ...	1.834	945·7	−1·1	943·1	84·2	−0·4	91	28	70·7	+1·9	68	24	73·6	77·2	70·8	71·9	24·4	+1·3	24·3	87	+6
Sholapur ...	1,570	954·6	−0·7	950·8	87·9	−0·8	95	29	70·3	−0·7	66	18	75·6	83·7	71·5	72·9	24·8	+1·6	23·3	82	+5
Miraj ...	1.817	946·9	−0·9	943·6	83·2	−1·1	93	29	69·3	+1·4	66	18,19	72·1	78·4	70·3	71·8	24·6	+0·9	24·0	92	+9
Kolhapur ...	1,885	944·7	...	942·1	80·9	...	89	27.28,29	69·2	...	67	5 days	72·1	76·4	69·9	71·3	24·1	...	24·2	90	...
Bijapur ...	1,950	941·4	−1·7	938·5	85·4	−2·0	91	29	67·6	−2·2	63	18,19	73·4	81·9	70·3	72·4	24·1	+1·2	23·3	85	+7
Belgaum ...	2,562	922·3	−1·3	919·9	76·9	−0·5	89	30	66·7	+1·0	64	.19	68·9	72·8	67·6	69·7	22·5	+0·1	23·5	93	+4
Gadag ...	2,131	937·1	−0·4	934·1	83·6	−1·7	92	29	69·0	+0·2	67	4 days	72·8	77·9	69·7	71·3	23·5	+1·0	23·5	85	+3
Hyderabad, North																					
Aurangabad ...	1,905	943·3	−1·0	940·1	84·3	−1·9	91	27	69·8	+0·6	65	19	73·1	79·7	71·1	73·6	25·2	+2·2	25·8	91	+13
Parbhani ...	1,350	959·8	...	954·9	87·9	...	95	28	71·2	...	66	18	75·9	83·2	71·9	74·2	24·9	...	24·8	81	...
Ramagundam ...	527	988·2	...	984·3	91·0	..	95	9.29	78·0	...	75	3,15,16	83·9	86·9	76·3	78·1	28·3	...	29·3	73	...
Nizamabad ...	1,250	963·4	−1·5	959·9	87·8	+0·2	92	28.29,30	72·0	−0·9	68	18	76·2	85·2	72·6	74·9	25·8	+0·1	24·9	83	+3
Bidar ...	2,178	933·6	...	930·3	84·6	+0·5	90	29,30	69·5	−0·6	65	18	73·7	80·8	69·7	71·3	23·2	−0·2	22·3	83	0

* Data not reliable

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																				STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.										
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Madhya Pradesh West *(Contd.)*
4·2	...	3·9	4·73	...	1·53	16	5	...	3·8	...	8	1	1	2	3	3	6	4	2	7	3	1	1	4	3	3	6	2	Chhindwara
4·7	...	5·1	6·94	...	4·16	16	8	...	3·6	...	2	2	1	2	3	4	7	6	3	6	5	1	1	2	1	6	5	3	Betul
4·2	−0·5	4·7	3·38	−4·63	1·37	8	8	−2·6	4·4	...	8	2	1	2	1	5	3	5	3	4	7	1	2	2	5	3	3	3	Nagpur
																													Gujarat Deesa *
6·3	+1·1	5·6	5·28	−0·52	0·92	13	13	+5·6	4·7	+0·9	1	0	1	3	1	2	6	7	9	0	0	0	1	1	24	0	3	1	Surat
4·7	+0·6	4·1	25·06	+20·90	10·15	17	8	+2·8	3·8	+0·3	4	0	0	1	3	6	6	9	1	1	1	2	1	3	6	6	9	1	Ahmedabad
6·1	+0·4	5·6	17·95	+12·32	4·90	17	11	+3·8	10·9	+4·4	0	0	0	0	1	11	15	1	2	0	0	0	0	0	11	19	0	0	Dohad
4·7	+0·3	4·5	13·03	+7·07	3·92	17	9	+2·3	2·4	−1·0	0	0	1	0	2	8	3	2	14	0	0	0	0	4	6	5	1	14	Baroda
																													Saurashtra & Kutch
3·7	−0·1	3·6	1·38	−0·43	0·62	7	3	+0·8	6·7	−0·9	0	0	0	0	0	5	21	4	0	0	1	0	0	0	15	13	1	0	Bhuj
4·4	+0·2	3·8	0·59	−0·88	0·33	5	2	0	9·3	+0·8	0	0	0	0	0	4	19	6	1	0	0	0	0	0	2	23	5	0	Dwarka
4·5	+0·9	...	1·64	−0·59	1·36	4	2	−0·7	7·5	−1·5	0	0	0	0	0	11	15	1	3	...	...	...	...	...	..	...	...	...	Jamnagar
4·1	−0·8	5·8	1·29	−2·05	0·74	5	3	−1·9	9·2	+2·2	2	0	0	1	1	5	14	7	0	1	2	0	2	0	6	10	8	1	Rajkot
4·9	+0·4	3·8	2·25	−0·24	0·95	6	3	−0·9	10·1	...	4	1	0	0	0	2	7	6	10	0	0	0	0	0	1	20	9	0	Veraval
4·5	+0·1	4·9	3·91	+0·13	1·37	17	8	+2·3	5·1	0	0	0	0	0	1	7	15	4	3	1	0	3	6	9	3	5	0	3	Bhavnagar
																													Konkan
6·3	...	5·7	8·95	...	1·66	24	13	...	9·5	...	0	1	8	8	1	5	6	1	0	1	0	1	0	1	5	17	5	0	Dahanu
5·9	+0·2	6·0	21·50	+11·11	4·78	4	14	+1·3	5·3	−1·7	2	5	4	3	7	2	3	4	0	4	0	0	0	1	6	7	12	0	Bombay
6·4	+0·6	...	23·89	−13·42	4·30	12	15	+0·5	7·7	−1·1	2	2	3	4	1	5	4	1	8	...	...	...	...	...	...	...	...	...	Alibag
6·4	..	6·7	38·12	...	8·62	3	20	...	8·2	...	5	4	4	4	3	4	2	4	0	0	0	0	2	4	5	10	9	0	Harnai
6·4	...	6·4	42·55	...	6·65	12	22	...	10·5	...	3	6	4	0	2	0	10	5	0	0	1	0	0	0	2	20	7	0	Devgad
6·7	...	7·2	34·97	...	5·44	12	21	...	...	...	1	0	0	0	0	0	6	0	23	0	0	0	0	0	0	11	1	18	Vengurla
5·6	−0·1	6·2	22·52	+14·86	3·28	12	22	+7·8	8·3	+3·4	1	8	4	1	4	3	0	3	0	1	0	0	0	0	5	16	8	0	Marmagao
6·3	...	6·9	32·89	+19·32	4·81	4	24	+7·4	2·5	...	0	1	6	4	0	1	3	3	12	0	0	0	0	0	1	17	7	5	Honavar
																													Deccan (Desh)
5·2	...	4·9	8·37	+2·36	1·88	13	12	+4·3	5·3	...	0	1	1	0	2	3	16	6	1	5	4	1	1	0	8	4	7	0	Jalgaon
5·9	+1·6	6·6	7·44	+1·65	4·12	28	13	+5·3	5·2	−0·7	0	0	0	0	0	0	12	0	18	2	3	0	0	1	0	11	10	3	Malegaon
6·6	...	...	9·43	...	1·85	2	14	...	6·5	...	0	1	0	0	0	12	12	3	2	...	...	...	...	...	...	...	...	...	Deolali
6·1	+1·7	6·9	12·30	−5·65	5·80	12	12	+3·4	5·2	−1·0	1	2	0	0	0	6	4	11	6	2	4	0	0	0	8	8	6	2	Ahmednagar
6·4	+1·0	6·9	6·89	+1·60	1·37	24	17	+9·4	2·7	−4·0	0	0	0	0	0	1	13	1	15	1	0	1	0	0	2	20	3	3	Poona
4·7	−0·3	6·3	12·35	+4·76	4·12	8	11	+1·9	5·9	−0·5	5	4	1	0	0	10	5	0	5	2	3	1	0	0	14	3	1	6	Sholapur
6·1	−0·2	6·2	5·26	+1·38	1·38	30	11	+5·3	6·0	−1·5	1	0	0	0	0	9	14	4	2	0	0	2	1	0	7	14	5	1	Miraj
6·0	...	6·0	4·14	...	0·80	24	10	...	8·7	...	0	0	2	0	0	2	20	1	5	0	1	0	0	0	2	25	2	0	Kolhapur
6·1	+1·3	6·9	7·30	+1·76	2·09	22	10	+2·0	7·0	+1·0	5	1	0	0	0	7	10	6	1	1	3	1	1	0	6	9	8	1	Bijapur
7·5	+1·6	7·8	8·93	+4·13	1·37	30	20	+10·9	5·0	+1·2	1	0	1	6	8	7	5	0	2	1	0	5	5	6	8	4	0	1	Belgaum
7·1	+1·7	7·2	4·46	−0·22	1·22	9	9	+2·6	9·6	+1·4	0	0	0	0	1	14	14	1	0	0	0	0	0	0	14	15	1	0	Gadag
																													Hyderabad, North
5·8	+0·5	6·2	9·96	+3·27	2·53	21	14	+5·0	6·4	−0·5	1	1	0	0	0	10	14	4	0	3	0	0	0	0	9	10	6	2	Aurangabad
4·2	...	6·1	10·98	+2·93	2·29	21	11	+1·4	...	...	0	0	0	0	0	0	28	0	2	8	0	0	0	0	0	12	4	6	Parbhani
3·1	...	4·4	6·78	...	2·22	11	10	...	3·4	...	2	4	0	5	8	4	1	3	3	4	7	0	3	4	4	4	2	2	Ramagundam
5·0	+0·4	5·4	10·69	+1·78	6·30	12	9	−1·0	3·9	+0·8	0	1	0	0	0	16	1	2	10	4	3	0	0	0	9	0	4	10	Nizamabad
4·7	−0·1	6·0	7·93	−0·61	2·68	11	11	0	9·3	+1·6	2	1	1	1	1	8	10	6	0	3	5	2	0	0	9	7	4	0	Bidar

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature °F		Vapour pressure, millibars			Relative humidity %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Hyderabad, South																					
Gulbarga ...	1,503	956·5	−0·9	952·4	87·0	−1·6	93	29	70·1	−1·4	66	18,19	75·0	82·5	71·8	72·8	25·4	+1·7	23·6	85	+7
Raichur ...	1,311	963·4	−0·7	959·3	88·6	−0·7	94	29	72·2	−0·4	68	18	75·9	80·2	71·8	73·0	24·8	+0·5	24·5	81	+5
Hyderabad (Begumpet) ...	1,778	946·9	−0·7	943·7	86·2	0	91	4 days	70·9	−0·5	68	10,18,19	75·5	81·7	71·8	73·5	25·2	+0·1	24·9	84	+4
Hanamkonda ...	881	976·2	−1·1	972·9	89·0	+0·8	95	29	74·0	−0·5	72	4 days	79·4	84·7	74·3	75·4	26·7	−0·4	25·8	78	+1
Khammameth ...	367	993·8	...	990·2	89·9	...	95	8,29,30	75·9	...	73	9	80·5	86·6	76·0	77·3	28·6	...	27·8	81	...
Coastal Andhradesa																					
Nellore ...	66	1004·9	−0·7	1001·0	92·4	−2·3	98	22	77·7	−0·5	73	20	83·1	88·0	76·1	77·6	27·6	−0·1	27·6	72	+2
Ongole ...	38	1005·2	...	1001·6	91·5	...	96	5 days	78·7	...	75	7,9,10	82·9	87·7	76·7	78·5	28·6	...	29·2	74	...
Masulipatam ...	10	1006·1	−0·9	1002·8	88·3	−2·2	93	22,30	78·1	+0·5	73	5	81·2	84·9	77·5	78·5	30·5	−0·4	30·4	84	+3
Kakinada ...	26	1005·0	−0·9	1001·6	89·0	−0·8	95	20,29	77·7	−0·4	74	12,4	82·3	85·5	77·9	79·1	30·6	−0·2	31·1	81	+1
Visakhapatnam ...	126	1001·0	−1·0	998·1	87·5	−0·9	93	30	78·8	+0·4	74	1,18,23	82·5	84·1	77·2	78·1	29·5	−0·7	30·1	78	+1
Calingapatam ...	19	1004·3	−1·1	1001·6	89·5	−0·3	96	30	78·4	0	74	22	81·6	85·5	77·7	79·4	30·4	−1·5	31·6	83	0
Rentachintala ...	348	995·0	...	991·0	91·2	−2·5	98	29	75·8	−1·5	72	9,10	80·8	87·2	74·9	75·5	26·9	−0·3	24·8	75	+5
Rayalaseema																					
Cuddapah ...	428	993·8	−0·4	988·9	90·5	−3·1	96	30	76·5	0	73	10,24	80·8	86·3	75·8	77·5	28·2	+1·8	28·2	79	+8
Bellary ...	1,473	958·0	−1·0	954·2	87·8	−2·7	95	29	74·0	+1·0	70	19,30	79·8	84·1	70·7	72·3	22·9	+0·5	21·8	72	+2
Kurnool ...	923	976·5	−0·5	972·2	87·9	−2·1	95	29	73·3	−0·7	69	17,18,19	77·6	83·9	73·0	74·5	25·7	+0·9	24·9	79	+4
Anantapur ...	1,147	969·0	...	964·7	90·2	...	96	29	73·2	...	69	17	77·3	86·3	71·5	73·0	23·8	...	21·7	74	...
Tamilnad																					
Pamban ...	37	1007·9	−0·2	1004·3	88·2	−1·0	91	24,25	79·3	+0·6	78	5 days	82·9	83·4	76·9	77·1	28·9	−1·2	28·9	75	−2
Mathurai ...	437	993·9	+0·2	989·9	95·9	+2·1	99	18,20,23	76·1	+0·2	72	22	83·8	88·5	73·6	74·6	23·6	−1·6	22·9	60	−6
Nagapattinam ...	31	1007·7	−0·4	1003·8	92·7	0	96	8,17,18	77·7	+0·3	72	25	82·0	86·9	74·9	78·4	26·4	−1·4	29·3	71	−1
Tiruchi ..	295	998·9	−0·3	994·5	93·9	−0·2	97	16,17,23	77·4	+1·2	73	29	81·5	89·9	73·3	74·4	24·3	−2·2	22·0	67	−5
Coimbatore ...	1,341	963·9	−0·5	960·7	86·4	−2·3	90	20,21	71·4	+0·5	69	21	75·8	80·5	70·5	71·5	23·1	−2·1	22·3	76	−5
Salem ...	913	977·9	−0·6	973·4	90·1	−1·7	94	22,23	73·5	+0·5	70	24	77·2	86·1	72·3	74·5	24·8	−1·2	23·5	78	0
Kallakurichi ...	416	994·0	...	989·8	93·4	...	98	17,22	75·6	...	72	6,7	80·5	89·7	73·7	75·2	25·4	...	23·3	71	...
Cuddalore ...	39	1006·9	−0·6	1002·7	93·5	+1·0	99	16	76·1	−0·7	73	2,22	82·6	87·5	75·5	77·8	26·9	−1·6	28·1	72	−3
Vellore ...	703	984·1	−0·3	980·1	91·4	−0·8	97	20	76·0	+0·7	71	23	79·9	87·3	73·3	75·8	25·1	−0·8	25·2	72	−1
Madras ...	51	1006·2	−0·3	1002·2	91·2	−2·7	96	16,22	77·2	0	71	23	81·7	86·6	75·3	77·3	27·0	−0·7	27·8	74	+2
Arogyavaram ...	2,299	931·4	...	927·9	83·7	...	88	22,30	70·0	...	68	4 days	73·9	79·9	69·0	70·8	22·2	...	22·1	78	...
Malabar And South Kanara																					
Mangalore ...	72	1008·0	−0·3	1005·5	82·0	−2·3	85	2,7,12	73·4	−0·9	70	9	75·9	78·3	74·4	75·5	28·4	−0·4	28·9	93	+5
Kozhikode ...	27	1009·8	−0·1	1007·2	83·1	−1·3	87	1,21	74·1	−0·5	70	4	76·5	79·6	75·6	77·3	29·8	+1·1	30·8	95	+7
Palghat ...	319	999·8	...	996·5	83·5	...	87	28,30	73·0	...	70	4	75·9	78·8	73·9	74·5	27·7	...	27·2	91	...
Mysore																					
Chitaldrug ...	2,405	927·8	−0·9	924·7	81·0	−3·3	88	30	68·0	0	66	17,18,20	70·5	77·7	67·7	70·0	22·1	+0·2	21·9	87	+1
Hassan ...	3,149	905·0	...	902·4	76·8	−4·2	83	4 days	64·8	0	62	20,21	67·3	72·3	65·9	67·6	21·3	+0·3	21·3	93	+11
Bangalore ...	3,021	908·7	−0·5	905·6	79·7	−2·4	85	27	65·4	+0·1	63	18,20	68·7	75·4	66·0	68·2	20·4	−0·8	20·5	87	+3
Mysore ...	2,518	925·4	−0·4	922·6	81·3	−2·9	86	26,28	66·6	0	62	20	70·6	75·8	67·7	69·1	21·9	+0·2	21·7	86	+1
~~Bidchonnur ...~~	~~2,917~~	...	...	...	~~73·5~~	~~−3·0~~	~~+1~~	~~27,30~~	~~64·9~~	~~+0·4~~	~~63~~	~~7 days~~	~~67·4~~	...	~~66·6~~	...	~~23·1~~	~~+0·4~~	...	~~95~~	~~+~~

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Hyderabad, South
5·1	+0·2	6·2	13·26	+5·80	3·18	9	15	+4·9	8·3	+1·5	2	3	1	0	0	6	15	3	0	3	1	3	0	2	1	14	6	0	Gulbarga
5·7	+1·3	6·5	5·90	−0·33	0·91	9	10	+0·6	9·0	+1·6	1	1	0	0	0	10	10	8	0	0	3	3	0	2	7	6	9	0	Raichur
4·4	−0·9	6·1	12·85	+6·40	3·27	11	10	+0·5	8·2	+2·1	2	1	0	0	0	0	14	11	2	2	6	1	0	1	0	13	6	1	Hyderabad (Begumpet)
3·8	−1·2	5·2	15·43	+8·09	6·71	11	11	+1·9	5·2	+0·9	8	1	0	0	0	2	8	10	1	5	5	0	1	1	1	8	8	1	Hanamkonda
4·6	...	5·5	7·57	...	2·15	11	11	...	3·9	...	9	0	0	0	0	5	11	2	3	6	2	2	0	3	3	10	0	4	Khammameth
																													Coastal Andhradesa
5·4	0	5·4	7·02	+2·56	1·67	9	8	+2·1	3·8	−0·5	0	0	0	0	0	2	18	1	9	0	2	5	0	0	2	8	1	12	Nellore
5·2	...	5·6	8·00	...	2·43	9	10	...	4·8	...	0	2	0	0	0	4	10	0	14	0	1	3	1	1	5	12	1	6	Ongole
6·0	+0·6	5·7	10·46	+4·09	4·47	10	11	+1·1	6·2	+1·7	0	0	0	0	1	3	16	5	5	2	1	2	4	2	1	11	4	3	Masulipatam
4·2	−1·2	4·6	5·58	−0·58	1·10	4	11	+2·2	6·3	+2·1	0	4	0	0	0	21	1	3	1	0	4	3	2	0	16	1	4	0	Kakinada
5·1	−0·7	5·1	5·71	−0·84	1·58	18	8	−1·1	4·0	+0·6	0	4	1	1	1	1	17	3	2	0	1	3	3	4	9	9	1	0	Visakhapatnam
5·8	+1·3	6·6	1·53	−5·40	0·60	18	3	−6·1	6·5	+2·0	0	1	3	1	0	6	12	7	0	0	1	5	4	4	8	6	2	0	Calingapatam
5·9	+0·1	6·1	7·26	+2·50	3·30	10	8	+0·2	5·3	−0·6	1	1	0	0	0	6	15	2	5	8	0	1	0	1	1	14	2	3	Rentachintala
																													Rayalaseema
5·8	+0·4	6·1	6·27	+0·24	1·56	10	9	+0·7	(j) 2·5	−2·4	0	0	0	0	0	0	16	0	14	0	0	2	0	0	0	10	0	18	Cuddapah
6·4	+1·4	6·4	2·34	−2·53	1·75	30	3	−4·1	7·4	+1·1	0	0	0	0	0	1	20	4	5	0	0	0	0	0	4	21	4	1	Bellary
5·8	+0·4	5·6	6·11	+0·15	1·42	10	13	+3·8	7·8	+1·7	0	0	1	0	0	7	15	5	2	3	1	0	1	2	6	10	5	2	Kurnool
5·8	...	5·9	3·51	−2·77	2·52	23	3	−3·9	(b) 10·0	...	0	0	0	0	1	8	18	3	0	3	2	0	0	0	4	16	2	3	Anantapur
																													Tamilnad
4·0	+1·1	5·9	0	−1·14	0	...	0	−1·9	10·0	+2·2	1	1	1	6	3	16	2	0	0	0	0	0	8	13	8	1	0	0	Pamban
5·7	+0·9	6·5	0·93	−3·77	0·75	28	2	−4·5	4·6	+1·4	2	0	0	0	0	1	11	3	3	0	0	1	3	2	3	19	1	1	Mathurai
6·5	+2·3	6·1	4·25	+0·95	2·44	25	8	+2·9	5·1	+0·3	0	0	0	0	0	11	13	4	2	0	0	3	9	4	11	2	0	1	Nagapattinam
6·7	+2·5	6·4	2·09	−2·63	0·91	27	5	−1·0	15·8	+5·2	1	0	0	0	0	0	12	17	0	2	2	1	0	4	0	14	7	0	Tiruchi
5·0	+1·1	5·9	2·19	+0·60	1·66	26	2	−1·3	10·0	+5·3	0	0	0	0	11	15	3	0	1	0	0	1	0	9	14	6	0	0	Coimbatore
5·8	+1·1	6·5	3·99	−2·08	1·84	24	8	−0·5	4·7	+1·6	0	0	0	0	4	13	11	0	2	2	0	0	0	3	5	13	1	6	Salem
5·5	...	6·2	3·62	...	1·43	24	8	...	...	...	1	2	0	2	7	4	1	2	11	0	2	0	1	1	10	0	1	15	Kallakurichi
6·5	+1·9	4·6	3·29	−1·92	0·87	18	8	+1·8	5·5	+1·6	3	0	0	0	0	14	6	6	1	2	0	0	13	0	9	1	2	3	Cuddalore
5·2	+1·2	6·8	5·09	−1·79	1·18	26	7	−1·1	4·8	+1·7	0	0	0	0	0	7	13	1	9	3	2	2	2	1	6	11	3	0	Vellore
5·9	+0·9	5·8	6·96	+2·28	2·75	23	8	+1·0	8·4	+0·4	0	0	1	0	0	8	17	3	1	0	1	4	12	0	2	6	4	1	Madras
6·7	...	7·2	2·03	...	0·45	23	7	...	6·7	...	0	0	0	0	0	0	17	10	3	5	1	0	0	0	3	8	11	2	Arogyavaram
																													Malabar And South Kanara
7·2	+1·4	7·3	23·07	+12·59	2·24	3	26	+10·5	4·4	+0·5	2	1	7	5	1	4	2	5	3	4	0	0	0	1	9	7	9	0	Mangalore
6·7	+1·3	6·8	17·74	+9·80	2·36	4	23	+11·3	6·2	+1·8	5	4	3	0	1	0	8	8	1	1	0	1	0	0	1	14	13	0	Kozhikode
6·3	...	6·3	11·17	...	1·42	26	17	...	7·1	...	0	0	0	0	0	6	23	0	1	0	0	0	0	0	3	26	1	0	Palghat
																													Mysore
6·5	+0·3	6·2	5·60	+1·23	3·02	30	5	−2·1	8·1	+2·2	1	0	0	0	0	14	13	2	0	0	0	0	0	1	13	13	1	2	Chitaldrug
7·8	+2·0	7·8	2·25	−2·08	0·45	27	11	+2·9	8·6	+3·5	1	1	0	0	0	4	22	2	0	0	0	0	0	1	6	22	1	0	Hassan
7·5	+0·9	7·0	4·18	−2·48	1·81	27	7	−1·9	9·5	+3·7	1	0	0	0	0	8	16	1	4	1	2	0	0	0	5	17	4	1	Bangalore
6·4	+0·6	7·0	2·45	−2·50	0·98	28	5	−3·2	7·2	+1·2	1	0	0	1	2	7	19	0	0	0	0	1	1	0	3	24	1	0	Mysore
...	...	...	~~21·12~~	~~+13·44~~	~~3·25~~	~~13~~	~~30~~	~~+4·0~~	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	~~Bolchonnur~~

(j) Mean of 21 days

(b) Mean of 29 days

STATION	Height of barometer cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Travancore–Cochin																					
Fort Cochin ...	10	1010·9	−0·1	1008·1	82·0	−1·0	86	1	75·1	−0·3	70	5	77·8	79·7	75·2	76·2	28·7	+0·1	29·3	88	+4
Alleppey ...	12	1010·7	...	1008·2	84·1	...	88	1,21	73·9	...	71	30	78·6	80·3	76·1	76·9	29·6	...	30·0	89	...
Trivandrum ...	211	1003·9	+0·2	1001·4	83·9	...	87	21,23,25	73·4	...	70	4	77·1	80·0	74·6	75·3	28·1	+0·5	27·9	88	+5
Nagercoil ...	195	1003·8	...	1000·8	86·0	...	91	25,30	74·8	...	71	4	78·5	80·9	74·2	74·8	27·0	...	26·7	81	...
Hill Stations Excluding Kashmir																					
Aijal ...	3,599	887·2	...	885·8	74·0	...	80	14,20	67·5	...	65	2	71·9	71·5	69·5	70·2	23·6	...	24·7	89	...
Shillong ...	4,921	848·6	−0·3	845·9	75·6	+1·3	79	4 days	62·3	+0·7	59	7,8,21	70·6	69·0	65·6	66·5	19·5	0	21·2	76	−3
Cherrapunji ...	4,309	867·8	+0·1	865·0	73·7	+0·4	80	12	64·5	−0·1	61	28	69·3	69·1	66·5	67·0	21·0	−0·1	21·8	87	+3
Darjiling ...	7,432	775·7	−0·8	773·3	65·9	+1·3	72	22	56·2	+0·2	53	28,29	60·7	60·2	59·7	59·3	17·1	+0·6	16·9	95	+5
Kalimpong ...	3,965	878·3	+0·4	875·3	75·1	+0·4	82	12	65·9	+0·1	62	29,30	68·5	70·7	67·0	68·5	22·0	−0·6	23·0	93	+4
Katmandu ...	4,388	865·6	...	862·5	83·7	+1·1	88	21,22	65·4	−0·3	57	30	72·1	74·6	68·1	69·4	21·9	+0·6	22·4	81	+2
Muktesar ...	7,592	771·1	−0·9	769·4	66·3	−1·4	73	6	55·2	+0·1	51	20	60·7	61·3	56·0	58·9	14·0	−0·4	14·7	79	−2
Mussooree ...	6,699	795·4	...	793·7	67·3	−0·2	72	7	56·9	−0·4	53	20,29	62·2	62·0	58·5	60·7	15·5	−0·7	16·8	82	−6
Simla ...	7,224	780·5	−0·6	779·6	66·3	−2·1	71	9,22	55·9	−0·4	52	5 days	60·8	61·5	54·5	57·2	12·3	−1·1	14·5	69	−2
Abu ...	3,945	876·9	−1·0	875·2	76·0	+0·8	81	7,12,28	64·7	−0·1	60	23	68·9	72·6	66·3	68·4	21·0	+2·3	22·1	87	+7
Pachmarhi ...	3,582	890·3	−0·8	888·0	78·3	+0·8	84	11	66·7	+0·6	63	23,24,25	71·1	76·1	68·1	70·7	22·1	+0·6	23·1	86	+3
Mahabaleshwar ...	4,534	860·3	−1·2	858·6	67·8	0	77	28,29	61·1	+0·3	58	22,24	63·5	64·5	63·3	64·4	19·8	+0·6	20·6	98	+1
Mercara ...	3,781	884·5	−0·6	883·0	69·2	−2·6	77	28,30	62·3	+0·5	60	21	64·3	65·8	63·9	64·8	20·1	+0·6	20·5	98	+6
Kodaikanal ...	7,688	770·5	+0·1	768·7	62·4	−0·3	67	20	52·0	0	49	16	55·7	56·0	52·5	54·1	12·4	−0·2	13·6	82	+6
Ootacamund ...	7,364	778·8	−0·6	777·2	62·1	−2·5	67	7 days	50·2	−0·8	43	21	55·0	56·4	53·1	54·5	13·1	−0·1	14·0	88	+5
Coonoor ...	5,730	825·3	...	...	70·5	−0·6	75	19	58·3	+2·0	50	19	66·8	...	62·0	...	17·3	+2·9	...	77	+11
Tibet																					
Lhasa ...	12,090	(p) 652·6	...	...	71·0	...	79	24	45·5	...	38	30	54·8	...	53·8	...	13·9	...	...	94	...
Gyantse ...	13,110	627·1	...	...	68·0	+0·9	75	4	39·6	−0·2	33	29	53·8	...	45·6	...	7·9	−0·2	...	57	−1
Ceylon																					
Colombo ...	24	1010·6	+0·1	1007·8	84·5	−1·5	86	27	76·9	+0·3	70	13	80·4	80·4	76·1	75·9	28·8	−0·1	28·5	82	−1
Trincomalee ...	24	1008·4	+0·4	1004·8	92·8	+0·8	96	18	77·5	+0·8	72	26	81·7	86·1	75·2	77·1	26·9	−0·4	27·7	73	−5
Hambantota ...	61	1008·2	−0·1	1005·1	87·1	+0·5	93	17	76·5	+0·5	74	5	80·3	82·1	75·5	75·6	28·0	−0·4	27·3	79	−6
Mannar ...	12	1008·8	...	1005·9	87·5	...	92	25	79·0	...	74	25	82·0	82·8	77·5	77·5	30·2	...	29·8	81	...

(p) Mean of 15 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.									
Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Travancore–Cochin
7·2	+2·1	7·2	16·93	+9·26	2·77	6	17	+3·3	7·5	+3·1	3	5	5	1	0	2	6	6	2	1	0	2	0	0	1	10	16	0	Fort Cochin
5·9	...	6·3	35·12	...	4·80	28	21	...	8·6	...	3	5	3	0	0	3	4	12	0	2	0	0	0	0	1	8	19	0	Alleppey
6·0	+0·6	6·0	9·22	+4·71	2·53	4	14	+5·9	6·9	+1·1	10	0	0	0	0	0	2	17	1	4	0	0	0	0	0	6	20	0	Trivandrum
6·0	...	6·5	5·60	...	1·49	4	10	...	10·1	...	0	0	0	0	0	0	13	17	0	0	0	0	0	0	0	24	6	0	Nagercoil
																													Hill Stations Excluding Kashmir
3·9	...	5·1	5·86	...	1·36	28	12	...	2·6	...	1	2	5	8	8	3	2	0	1	0	0	1	5	3	4	7	5	5	Aijal
6·0	+0·4	7·1	6·18	−5·61	1·06	13	14	−3·3	0·9	−0·6	0	0	0	4	0	3	0	0	23	0	0	1	2	1	0	0	0	26	Shillong
6·8	+0·7	6·1	11·08	−32·27	1·73	27	16	−3·2	6·5	+2·6	1	10	5	1	5	5	3	0	0	0	5	2	1	1	11	8	0	2	Cherrapunji
7·0	+0·6	6·5	6·97	−11·93	2·31	2	14	−3·0	5·3	+2·1	0	2	12	6	0	2	4	0	4	0	0	5	4	0	7	12	0	2	Darjiling
5·4	−0·3	4·4	6·80	−4·52	1·27	3	12	−0·7	4·9	−0·7	1	0	0	6	0	0	2	6	15	0	0	0	25	1	0	0	2	2	Kalimpong
6·3	+0·3	6·0	1·88	−5·28	0·78	7	5	−8·3	6·7	−0·1	0	0	3	4	2	0	0	0	21	2	0	2	0	1	0	0	2	23	Katmandu
4·0	−0·3	4·8	6·84	−1·09	1·03	20	12	+1·9	6·7	+1·7	1	4	7	2	0	0	4	4	8	0	3	4	2	0	7	10	3	3	Muktesar
4·6	−0·2	5·7	8·63	−1·32	3·45	4	12	−0·8	3·0	−0·8	4	4	0	3	4	0	0	1	14	3	3	0	7	9	1	0	0	7	Mussooree
3·9	+0·3	4·7	9·75	+3·07	1·80	3	11	+1·7	2·0	−0·5	2	1	0	1	4	2	0	0	20	4	3	2	2	7	5	0	0	7	Simla
4·5	+0·1	4·4	25·88	+16·51	18·47	18	12	+4·4	4·2	−1·2	2	1	0	0	1	4	0	2	20	5	0	0	3	2	1	0	3	16	Abu
4·2	−1·0	5·2	15·78	+1·59	7·36	16	11	−2·1	3·5	−0·9	6	6	1	1	3	2	4	4	3	4	4	0	1	1	3	7	10	0	Pachmarhi
7·2	+0·2	7·3	35·78	+7·04	4·50	2	29	+6·4	7·2	−0·6	0	4	5	0	0	20	0	1	0	0	0	0	0	0	20	2	8	0	Mahabaleshwar
7·1	+0·7	6·9	27·81	+16·23	3·62	14	24	+5·8	8·3	+3·1	0	0	0	0	1	2	13	12	2	0	0	0	0	0	1	14	14	1	Mercara
6·3	+1·8	7·5	3·28	−4·00	1·22	29	6	−5·9	10·7	+3·4	1	1	0	2	1	0	10	13	2	1	2	0	2	1	0	5	16	3	Kodaikanal
5·3	−0·4	6·0	2·91	−2·92	0·52	26	10	−2·0	6·6	+3·1	0	0	0	0	0	2	15	2	11	1	0	0	1	0	2	16	3	7	Ootacamund
5·8	+0·8	...	2·25	−1·31	1·18	29	5	−2·0	3·6	+0·1	8	0	0	9	6	0	1	6	0	...	...	...	...	...	...	...	...	...	Coonoor
																													Tibet
0·9	...	...	2·74	...	0·51	5	10	...	0	...	0	0	0	0	0	0	0	0	30	...	...	...	...	...	...	...	...	...	Lhasa
3·1	−1·0	...	1·98	+0·69	0·40	1	8	+3·5	1·6	−0·8	0	2	2	6	2	2	0	0	16	...	...	...	...	...	...	...	...	...	Gyantse
																													Ceylon
7·2	+1·4	6·8	4·72	−0·95	1·44	13	10	+1·2	...	...	0	0	0	0	0	9	21	0	0	0	0	0	0	0	13	16	1	0	Colombo
6·4	+2·8	7·1	2·09	−1·80	1·18	20	3	−2·4	..	..	0	0	0	0	0	27	2	1	0	3	3	1	2	0	15	2	2	2	Trincomalee
6·3	+2·5	6·3	1·35	−1·31	0·45	12	6	+1·2	...	...	0	0	0	0	0	12	18	0	0	0	0	0	0	0	14	16	0	0	Hambantota
6·5	...	6·6	0·03	...	0·03	25	0	...	...	...	0	0	0	1	11	16	2	0	0	0	0	0	0	10	20	0	0	0	Mannar

TABLE *III*.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 4TH CLASS STATIONS—SEPTEMBER 1950

STATION	Maximum temperature, °F				Minimum temperature, °F				Mean dry bulb temperature 0830 hrs. I.S.T. °F	Mean wet bulb temperature 0830 hrs. I.S.T. °F	Vapour pressure, inches		Relative humidity %		Mean cloud amount, 0830 hrs. I.S.T.	Rainfall, inches				Number of rainy days (0·10″ or more)		Wind
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 0830 hrs. I.S.T.	Departure from normal	Mean 0830 hrs. I.S.T.	Departure from normal		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Resultant direction 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Assam																						
Lumding ...	91·6	+0·3	96	16	75·6	+0·4	...	...	84·4	78·5	30·6	0	75	–10	...	4·12	–3·26	1·52	22	7	–3·8	...
Jammu and Kashmir																						
Jammu ...	86·9	–5·0	93	5days	70·7	–4·4	59	20	74·9	70·4	23·5	+0·3	79	+11	3·6	23·69	+20·18	7·25	18	10	+5·9	N33E
Kargil (R) ...																						
Mysore																						
Balehonnur ...	73·5	–2·9	81	27,30	64·9	+0·4	63	7days	67·4	66·6	22·1	+0·4	95	+2	...	21·12	+13·44	3·25	13	20	+4·0	...
Sikkim ...																						
Lachen ...	..	...	...	...	41·7	...	38	19,23	59·0	...	...	...	...	...	...	8·64	...	1·22	8	23	...	...
Tibet																						
Yatung (Chumbi)	64·3	+1·6	67	4days	49·6	+2·5	37	29	58·4	54·6	13·4	+0·9	81	–4	4·8	3·05	–1·30	0·34	11	14	+3·0	...

(R) Register not received

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 5TH CLASS STATIONS—SEPTEMBER 1950

Division	Station	Rainfall, inches				Number of rainy days (0.10″ or more)		Division	Station	Rainfall, inches				Number of rainy days (0.10″ or
		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal			Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Assam ...	Mawsynram ...	10·41	...	2·50	5	18	...	Jammu & Kashmir	Sonamarg ...	14·00	+10·95	4·92	20	8
West Bengal ...	Bankura ...	6·18	–1·69	2·40	14	9	–2·0		Gurez ...	2·60	+0·74	0·85	19	7
Bihar ...	Muzaffarpur ...	3·72	–4·93	1·15	17	7	–2·5	Deccan (Desh) ...	Khandala ...	45·73	+18·38	9·03	3	25
	Chapra ...	5·98	–1·50	2·13	2	6	–2·7	Tamilnad ...	Palayamcottai ...	0·35	–0·98	0·25	30	1
	Arrah ...	4·36	–3·83	0·84	1	8	–1·5	Sikkim ...	Thangu ...	4·04	...	0·60	20	16
Punjab (I) ...	Dalhousie ...	33·60	+26·75	7·22	4	13	+4·7		Lachung ...	0·05	–7·64	0·02	13,21	0
	Kyelang ...	14·19	+12·58	5·05	17	9	+6·4		Chungthang ...	15·30	...	1·80	8	19
	Gondla ...	11·82	...	3·35	17	9	...							
	Koksar ...	24·86	...	7·60	17	14	...							
	Kothi ..	20·93	...	4·00	3	11	...							
	Dharampore ...	10·32	+3·21	3·15	3	10	+2·5							
	Kharsali ...	5·66	...	0·92	14	11	...							
	Rana ...	8·03	...	1·75	16	14	...							
	Jamuna Chetty ...	7·06	...	1·50	16	13	...							

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Note :— Data upto 9·0 Km. a.s.l. are given under Table A and data above 9·0 Km. under Table B.

In tables A & B

n represents the number of observations.

V represents the mean wind speed in m/second irrespective of direction.

v represents the resultant mean velocity in m/second.

D represents the direction of the resultant mean wind in degrees East of North.

For the co-ordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Weather Report-January 1950 and subsequent issues.

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

SEPTEMBER 1950

STATION	AHMEDABAD												ALLAHABAD										
Time in I.S.T.	0230				0730				1430				0230				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	2·3	1·6	254	30	2·2	1·6	262	30	2·2	1·5	259	30	2·1	0·4	69	30	2·0	0·3	271	30	3·5	1·5
0·15 a.g. ...	28	6·9	5·4	259	29	6·4	4·8	276	29	4·4	3·2	272	30	6·6	0·5	319	30	4·9	1·1	293	30	5·5	2·2
0·6 a.s.l. ...	27	6·7	5·4	268	26	6·9	5·7	292	29	4·3	2·9	272	29	7·2	0·6	296	28	6·0	2·4	299	30	6·2	1·6
1·0 ,, ...	26	5·0	2·8	278	22	5·1	3·5	292	27	4·5	2·9	273	27	6·7	2·4	296	28	6·6	3·0	307	29	6·0	2·0
1·5 ,, ...	23	3·9	1·2	296	20	3·7	0·9	258	21	4·5	2·5	258	25	7·4	3·2	306	27	7·2	3·6	322	27	6·2	2·9
2·0 ,, ...	19	3·1	0·6	120	18	4·7	1·3	240	17	4·4	1·9	269	22	7·6	4·7	311	27	7·5	3·8	332	25	6·4	4·0
2·5 ,, ...	17	3·8	1·1	154	17	5·0	2·0	203	14	4·4	2·2	250	21	5·9	4·7	311	26	7·6	3·1	330	22	6·8	4·0
3·0 ,, ...	16	4·4	1·3	164	15	4·8	1·3	221	13	5·0	3·2	217	21	5·2	3·8	300	24	5·9	2·8	305	20	6·2	3·7
4·0 ,, ...	8	6·4	3·8	235	12	6·2	4·5	225	8	7·5	6·6	231	12	4·6	3·3	242	22	5·1	2·9	243	16	5·8	3·4
5·0 ,, ...	3	4·2	3·9	218	10	9·3	8·2	227	6	7·8	7·6	245	5	7·5	5·4	258	20	6·3	3·9	219	14	7·8	6·4
6·0 ,, ...	2	6·2	6·7	239	10	7·8	7·0	237	5	6·1	5·8	261	3	5·7	4·5	263	20	6·1	4·0	217	13	7·7	5·7
7·5 ,, ...					8	5·8	4·6	237	2	7·7	7·7	237					15	5·9	3·8	205	11	8·5	6·0
9·0 ,, ...					6	7·8	3·8	254	2	5·7	5·7	231					9	7·9	5·8	221	7	8·9	8·7

STATION	AMBALA												ANANTAPUR								ASANSOL		
Time in I.S.T	0230				0730				1430				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	2·5	1·2	79	30	2·3	1·0	89	30	2·9	0·2	165	30	4·1	3·8	255	30	4·9	4·4	264	30	2·0	0·5
0·15 a.g. ...	30	6·7	2·3	85	29	6·0	1·7	83	28	5·6	0·7	331	30	6·6	6·3	256	30	7·5	6·7	265	30	5·0	1·2
0·6 a.s.l. ...	30	7·8	2·8	109	27	8·4	3·1	120	28	6·5	0·9	255	30	7·7	7·5	261	30	7·4	6·7	267	28	5·4	1·2
1·0 ,, ...	30	8·5	2·9	130	26	8·9	2·4	137	28	7·5	1·2	122	30	10·5	9·4	279	30	6·9	6·2	272	26	4·8	1·1
1·5 ,, ...	30	9·2	1·8	160	24	8·2	0·5	241	28	8·5	0·6	80	27	10·4	8·7	286	27	7·3	6·4	277	23	4·3	1·0
2·0 ,, ...	26	8·5	1·7	273	23	8·3	2·3	301	26	7·8	1·6	332	26	8·9	6·9	296	22	7·1	5·8	290	18	4·5	0·6
2·5 ,, ...	23	6·9	3·0	295	19	6·9	5·4	319	24	6·0	3·6	309	20	7·9	5·3	309	16	7·3	4·8	297	10	4·5	1·0
3·0 ,, ...	19	5·6	2·9	310	18	7·1	5·1	322	23	5·9	3·1	300	18	7·4	4·7	304	12	6·1	2·6	321	10	6·3	0·6
4·0 ,, ...	2	4·0	3·3	319	14	6·0	2·5	316	18	5·6	1·5	287	15	6·9	4·4	295	8	4·6	2·3	301	1	4·0	4·0
5·0 ,, ...	2	8·3	6·9	246	8	4·9	1·3	220	13	6·7	4·5	271	9	5·8	1·7	02	8	4·9	2·0	17			
6·0 ,, ...	2	6·5	6·1	247	8	7·7	4·0	214	12	7·9	6·9	255	5	5·1	4·1	91	6	4·1	3·3	79			
7·5 ,, ...					2	6·7	6·7	185	9	17·6	17·1	249	5	6·4	6·3	97	5	5·3	4·4	95			
9·0 ,, ...					2	6·3	6·1	227	6	14·1	23·7	218	5	9·7	9·5	83	4	6·4	6·2	87			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

SEPTEMBER 1950

STATION	ASANSOL								BANGALORE												BAREILLY			
Time in I.S.T.	0730				1430				0230				0730				1430				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·8	0·5	147	30	2·2	1·1	134	30	3·1	2·9	264	30	3·5	3·2	262	30	4·5	4·2	268	30	1·6	0·7	109
0·15 a. g. ...	29	4·0	0·6	226	30	4·4	1·6	136	27	7·1	6·5	266	30	7·5	6·7	267	30	8·6	7·8	266	28	5·9	0·6	26
0·6 a.s.l. ...	26	5·0	1·1	309	30	4·6	1·4	126													28	8·1	0·4	232
1·0 ,, ...	23	5·1	1·7	340	27	4·7	0·6	93	29	5·4	5·0	264	30	5·9	5·4	263	30	7·3	6·5	267	27	8·7	1·3	304
1·5 ,, ...	22	5·3	1·5	15	20	4·3	1·7	300	16	9·5	8·2	281	15	8·8	7·3	298	30	8·7	8·1	275	25	8·3	1·0	349
2·0 ,, ...	17	3·7	1·8	339	18	4·5	1·4	282	14	7·6	5·4	289	10	6·8	5·1	311	24	8·9	7·8	282	23	7·3	1·4	320
2·5 ,, ...	17	3·4	0·9	334	17	4·7	0·1	267	8	6·7	4·3	284	9	4·8	2·8	337	12	6·4	4·5	293	21	5·9	0·9	309
3·0 ,, ...	15	4·3	1·2	315	14	5·6	0·6	319	5	5·9	3·6	288	8	5·1	2·7	320	9	5·2	2·8	323	18	5·2	1·4	301
4·0 ,, ...	10	3·3	1·6	285	7	4·9	1·7	306					5	5·1	2·4	318	4	3·0	2·0	10	15	4·3	0·8	304
5·0 ,, ...	9	3·6	1·6	332	5	4·4	2·8	29					4	5·3	1·7	52	4	3·6	3·1	44	8	6·2	4·7	204
6·0 ,, ...	8	3·7	1·0	39	4	5·4	2·2	354					4	5·1	4·4	61	3	4·2	3·0	15	7	8·9	7·6	239
7·5 ,, ...	2	7·3	3·5	149	1	3·0	3·0	290					3	6·3	5·6	75					2	7·7	6·3	238
9·0 ,, ...	1	6·0	6·0	170	1	3·5	3·5	300					2	11·3	11·1	80								

STATION	BAREILLY				BHAGALPUR								BHOPAL											
Time in I.S.T.	1430				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	2·1	0·1	351	30	1·6	0·9	150	30	1·9	0·3	96	30	2·4	0·7	236	30	2·5	0·8	307	30	3·0	0·5	261
0·15 a. g. ...	29	5·1	0·9	5	30	4·8	1·7	162	30	4·6	0·8	75	24	6·0	2·3	299	26	5·9	2·6	298	27	4·6	1·5	278
0·6 a.s.l. ...	29	5·9	0·9	66	28	6·1	1·2	171	30	5·0	1·0	127	24	5·6	2·1	288	26	5·2	2·1	292	27	4·3	1·4	274
1·0 ,, ...	29	6·8	1·3	103	27	6·3	0·9	175	27	5·3	1·3	180	23	6·0	2·2	284	24	5·8	1·9	303	25	3·8	1·1	303
1·5 ,, ...	27	8·0	2·3	275	25	5·5	0·3	165	25	5·9	1·9	174	22	4·6	1·5	276	22	4·4	1·5	313	21	3·4	1·4	359
2·0 ,, ...	25	8·4	0·7	95	24	5·2	0·6	201	19	5·5	2·1	218	18	3·8	1·0	278	21	4·5	1·2	326	18	3·8	1·5	47
2·5 ,, ...	23	7·8	0·3	28	22	4·7	0·7	214	16	4·7	2·0	239	15	4·4	2·1	299	19	4·7	1·6	360	17	4·3	1·3	74
3·0 ,, ...	22	7·8	0·1	168	22	4·8	0·7	183	13	5·0	1·7	266	12	5·1	3·4	297	18	5·0	2·1	343	17	5·3	0·7	48
4·0 ,, ...	20	6·4	2·5	284	16	5·3	0·7	173	9	4·8	2·4	287	7	6·3	3·9	295	15	6·8	3·3	292	13	6·1	1·4	210
5·0 ,, ...	12	6·3	3·3	251	12	5·3	2·2	203	7	5·9	3·8	266	4	5·6	4·1	242	14	7·3	3·6	257	9	6·2	3·1	238
6·0 ,, ...	10	9·4	7·0	242	12	5·3	1·9	206	3	6·7	6·6	283	1	2·0	2·0	165	14	6·9	3·3	237	7	5·8	2·5	136
7·5 ,, ...	5	16·0	14·8	243	8	5·1	2·9	216	2	7·7	7·7	273					10	6·9	2·9	186	3	5·2	1·4	108
9·0 ,, ...	4	20·7	20·6	248	8	4·7	1·9	200	1	7·0	7·0	230					6	8·7	5·3	164	1	3·0	3·0	75

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

SEPTEMBER 1950

STATION	BHUJ												BIKANER								BOMBAY			
Time in I.S.T.	0230				0730				1430				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	30	2·1	2·0	242	30	1·8	1·6	249	30	2·8	2·2	245	30	2·0	1·1	228	30	1·7	0·8	301	30	2·7	1·8	2
0·15 a.g. ...	30	7·2	6·9	254	29	6·1	5·6	264	30	5·9	5·0	244	30	7·6	4·7	245	29	4·3	1·6	299	25	4·8	3·4	2
0·6 a.s.l. ...	30	8·3	7·6	257	29	8·9	8·3	269	30	5·8	4·8	250	28	9·2	6·4	271	29	4·3	1·3	308	24	5·6	4·3	2
1·0 ,, ...	28	5·8	3·0	246	27	7·5	5·9	254	30	5·8	4·5	254	26	7·7	4·8	279	30	4·8	1·5	309	22	5·1	3·8	2
1·5 ,, ...	25	5·8	1·2	172	25	6·5	3·1	238	28	5·7	3·3	254	25	5·1	2·5	282	29	4·7	1·5	277	17	3·7	2·4	2
2·0 ,, ...	24	6·4	1·2	82	24	6·6	1·6	261	22	5·9	1·7	285	24	4·1	1·5	334	24	4·4	1·0	297	9	2·9	0·3	
2·5 ,, ...	22	6·6	1·9	19	23	6·8	0·7	324	17	7·7	1·8	353	24	4·5	1·6	352	22	4·1	1·1	312	8	2·6	0·9	1
3·0 ,, ...	21	7·5	3·0	357	20	7·8	2·4	46	17	8·6	1·7	360	23	5·1	1·3	1	19	4·8	1·5	329	6	2·7	0·6	2
4·0 ,, ...	14	6·8	3·0	340	19	9·7	4·2	20	8	10·7	5·1	342	19	4·7	1·3	338	16	5·7	3·6	268	3	3·5	1·0	1
5·0 ,, ...	11	7·0	3·2	272	18	8·4	1·8	247	6	12·3	10·0	344	15	5·1	3·7	263	11	8·2	6·8	260				
6·0 ,, ...	9	5·7	2·5	294	15	7·7	5·7	261	6	11·5	8·8	257	12	10·4	9·8	255	10	13·5	13·3	249				
7·5 ,, ...	2	5·3	0·3	180	12	8·8	5·3	266	4	10·1	8·8	255	4	9·9	9·5	229	8	15·6	15·4	243				
9·0 ,, ...					9	7·9	1·8	216	4	11·6	9·5	254	2	11·3	10·5	231	3	14·7	14·4	243				

STATION	BOMBAY								CALCUTTA												COCHIN (Willingdon Island)			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	30	2·9	1·4	318	30	5·7	4·4	272	30	1·9	1·1	148	30	2·2	1·1	130	30	2·5	1·5	147	30	1·5	1·2	
0·15 a.g. ...	28	4·4	1·9	251	27	5·8	4·6	270	30	5·6	2·7	175	29	3·6	0·9	138	30	4·5	2·5	148	22	4·4	4·0	
0·6 a.s.l. ...	28	6·0	4·4	280	27	6·0	4·7	280	30	7·3	3·8	185	26	4·9	1·3	170	30	5·6	2·7	162	22	7·9	7·5	
1·0 ,, ...	26	6·1	4·5	283	27	5·9	4·2	271	29	6·3	2·3	189	24	4·8	0·7	127	28	5·2	1·6	169	17	10·2	9·9	
1·5 ,, ...	21	5·1	2·3	270	24	5·1	3·4	247	27	5·7	0·9	179	22	4·7	0·8	94	26	4·6	1·9	158	13	9·5	9·2	
2·0 ,, ...	14	4·4	1·7	226	19	4·5	2·7	233	27	5·6	1·5	153	21	4·2	1·2	102	25	4·9	2·0	158	9	7·7	7·4	
2·5 ,, ...	10	3·5	1·8	163	16	3·9	2·2	237	25	4·6	2·1	162	18	3·8	0·8	146	20	4·3	2·2	201	6	8·7	7·2	
3·0 ,, ...	10	3·3	1·5	162	14	3·5	0·8	105	23	4·7	2·2	182	17	4·3	1·7	181	19	4·3	2·2	207	3	6·3	3·0	
4·0 ,, ...	8	3·6	1·5	154	7	3·4	2·1	209	2	3·7	3·7	170	10	4·4	2·4	153	14	3·2	1·0	243				
5·0 ,, ...	7	3·7	2·0	136	6	3·0	2·1	156					4	2·9	1·1	121	11	3·8	0·6	63				
6·0 ,, ...	6	3·8	2·6	133	6	3·5	2·5	133					1	5·0	5·0	155	6	4·1	2·2	89				
7·5 ,, ...	6	3·9	3·1	124	3	3·5	3·1	152					1	3·5	3·5	135	4	5·6	1·8	109				
9·0 ,, ...	4	7·1	6·4	128	2	3·7	0·3	109									4	6·5	5·9	125				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

SEPTEMBER 1950

STATION	COCHIN (Willingdon Island)								COOCH BEHAR								CUTTACK							
Time in I.S.T.	0730				1430				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·4	0·8	324	30	4·2	3·7	300	30	0·9	0·5	93	30	1·3	0·6	165	30	0·4	0·3	289	30	0·8	0·1	290
0·15 a.g. ...	27	4·2	3·0	320	29	6·5	6·0	297	26	3·3	2·0	110	6	5·0	1·3	229	27	3·5	1·4	260	28	3·8	0·9	295
0·6 a.s.l. ...	26	8·8	8·0	303	29	9·8	9·3	300	22	5·8	3·3	111	6	5·3	3·4	225	27	5·7	1·9	257	26	5·7	1·3	289
1·0 ,, ...	22	10·6	10·1	303	27	11·2	10·8	301	21	5·7	2·8	112	6	6·7	5·1	212	27	5·8	0·9	278	23	5·8	1·2	356
1·5 ,, ...	16	10·7	10·3	298	16	10·1	9·6	296	15	6·1	2·9	104	5	7·3	4·6	220	26	6·0	1·5	30	22	6·0	2·0	29
2·0 ,, ...	8	7·6	5·7	288	11	9·5	8·8	299	12	6·5	1·9	99	4	8·7	4·7	226	25	6·2	1·4	26	21	6·3	2·4	25
2·5 ,, ...	6	7·5	5·1	268	7	6·7	5·2	291	8	6·0	2·1	89	3	6·5	3·1	184	17	6·5	1·1	30	20	5·7	1·7	51
3·0 ,, ...	4	8·0	6·1	269	4	5·1	1·9	287	7	5·8	2·4	94	1	5·0	5·0	190	15	6·4	2·3	64	19	5·1	2·0	57
4·0 ,, ...	1	10·0	10·0	255	4	5·1	0·7	22	5	4·6	2·5	162	1	3·0	3·0	215	6	6·5	3·2	83	13	5·0	1·8	82
5·0 ,, ...					3	5·0	4·6	61	4	5·0	3·8	185									10	4·5	2·6	102
6·0 ,, ...					2	3·3	3·1	68	4	5·6	4·7	253									8	5·3	4·0	112
7·5 ,, ...					2	5·0	4·5	99	4	5·6	5·2	269									4	8·5	7·9	102
9·0 ,, ...					2	8·3	8·1	75	3	6·8	6·5	251									3	13·8	12·9	110

STATION	CUTTACK				DEOLALI				DIBRUGARH								GADAG							
Time in I.S.T.	1430				0730				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·8	0·9	172	24	2·0	1·8	247	30	1·9	1·4	62	30	2·4	1·4	49	30	3·2	3·1	249	30	2·8	2·7	252
0·15 a.g. ...	27	4·7	1·8	172	21	3·8	3·3	253	22	3·6	2·5	62	30	3·2	1·8	60	25	8·8	8·3	259	26	7·3	6·7	260
0·6 a.s.l. ...	26	3·8	1·6	150	21	2·6	2·3	255	18	4·0	2·9	57	28	2·7	1·4	86								
1·0 ,, ...	25	3·7	0·9	129	20	5·1	3·4	269	15	4·3	3·4	51	27	3·0	1·0	204	25	10·3	9·1	276	24	9·9	7·8	280
1·5 ,, ...	25	4·1	1·0	90	17	5·3	2·1	279	13	3·8	2·3	69	25	4·2	2·4	204	22	9·9	8·0	278	21	9·4	6·6	294
2·0 ,, ...	22	4·7	1·4	57	14	3·6	0·6	190	12	3·7	1·4	99	23	4·9	3·2	199	21	8·5	5·8	289	19	7·3	3·7	299
2·5 ,, ...	17	4·5	1·9	22	11	2·9	1·5	174	10	3·8	2·0	130	20	4·9	3·3	202	21	6·8	3·9	293	17	5·4	1·6	314
3·0 ,, ...	15	5·2	1·7	21	11	2·9	1·4	166	10	4·3	2·1	167	19	4·7	3·7	216	16	5·3	2·4	266	15	5·2	1·2	299
4·0 ,, ...	11	5·2	2·3	25	11	3·2	0·6	104	9	4·3	2·5	201	14	4·5	3·4	237	11	3·9	1·6	337	12	4·7	1·7	6
5·0 ,, ...	10	5·4	3·5	57	10	5·1	2·4	96	6	5·3	3·7	238	14	6·1	5·7	249	8	3·9	1·7	86	12	4·9	1·9	52
6·0 ,, ...	6	7·8	6·9	56	8	5·6	3·6	85	3	6·3	5·3	238	12	6·2	5·5	260	5	5·0	3·4	77	6	5·1	2·3	58
7·5 ,, ...	3	7·7	7·1	91	5	6·5	6·0	105	2	4·5	3·3	213	10	6·7	5·5	263	1	2·5	2·5	45	6	5·5	4·9	110
9·0 ,, ..	2	9·5	9·5	93	2	7·5	7·5	101	2	5·0	4·2	270	7	7·1	3·8	271					2	7·3	7·3	103

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

SEPTEMBER 1950

STATION	GADAG				GAYA												GOPALPUR						
Time in I.S.T.	1430				0230				0730				1430				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	4·1	3·9	256	30	2·5	1·1	153	30	2·5	0·9	139	30	3·7	1·4	331	30	2·0	0·9	315	30	3·3	1·9
0·15 a.g. ...	28	9·7	9·0	256	29	4·9	1·2	215	30	4·8	1·0	183	30	5·7	2·2	359	30	4·5	2·3	314	29	5·2	1·6
0·6 a.s.l. ...					29	6·3	0·5	201	30	6·7	0·6	306	29	6·4	1·3	348	29	5·4	2·1	321	29	4·4	1·3
1·0 ,, ...	28	8·5	7·7	261	27	4·9	1·5	281	28	5·9	1·2	306	29	6·1	0·4	334	26	6·1	2·9	335	28	4·6	1·8
1·5 ,, ...	28	8·2	6·9	272	27	5·7	1·3	293	27	5·8	1·4	313	27	6·3	0·5	271	23	5·3	2·7	360	27	4·9	2·4
2·0 ,, ...	21	6·6	4·5	286	27	5·1	1·4	302	27	6·1	1·2	344	22	5·6	1·4	253	23	5·4	2·4	359	24	5·5	2·7
2·5 ,, ...	15	6·4	3·1	287	12	4·0	1·3	268	26	5·5	0·9	6	18	5·9	1·2	253	19	5·9	2·8	3	22	7·4	1·6
3·0 ,, ...	13	6·0	2·3	278	11	3·6	1·5	248	25	5·3	0·3	155	16	5·7	2·5	290	16	5·8	1·8	9	21	5·9	1·3
4·0 ,, ...	10	5·5	0·3	42					21	3·6	1·6	211	11	5·8	5·0	284	7	6·4	2·6	45	14	7·0	3·1
5·0 ,, ...	7	4·7	1·8	100					15	4·3	1·4	235	6	6·8	6·1	297	3	8·5	4·9	73	9	7·1	3·8
6·0 ,, ...	4	4·9	4·6	99					12	4·0	1·0	218	4	6·0	5·8	292					7	7·7	6·7
7·5 ,, ...	1	4·5	4·5	95					6	3·2	1·0	127	4	6·1	4·9	284					4	8·1	7·0
9·0 ,, ...	1	8·5	8·5	105					2	4·7	1·8	89	2	5·7	5·7	270					4	6·1	6·0

STATION	GORAKHPUR								HYDERABAD (Dn.)												JAGDALPUR		
Time in I.S.T.	0730				1430				0230				0730				1430				0230		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	2·0	0·2	56	30	2·6	0·9	258	30	4·1	3·8	264	30	3·2	2·9	276	30	4·5	2·8	277	30	0·8	0·5
0·15 a.g. ...	29	5·4	1·4	46	30	5·1	1·2	88	30	8·8	6·7	270	30	7·1	5·9	281	30	6·4	3·9	288	27	4·5	2·0
0·6 a.s.l. ...	27	7·2	0·8	83	30	5·8	1·4	85	30	6·3	5·0	263	30	4·8	4·3	280	30	5·9	3·2	277	27	3·2	1·5
1·0 ,, ...	23	6·8	0·8	281	30	6·6	1·5	100	29	10·5	8·0	281	29	9·7	7·6	296	30	6·5	3·9	293	26	5·6	2·0
1·5 ,, ...	22	6·2	1·4	314	28	6·2	0·1	340	26	9·3	6·4	298	24	8·9	6·3	311	29	7·3	5·2	302	24	7·2	3·3
2·0 ,, ...	20	4·8	1·5	330	26	5·4	1·7	283	26	9·1	5·6	303	21	9·5	4·9	314	26	7·6	4·9	304	20	7·1	4·4
2·5 ,, ...	20	3·7	0·3	340	25	4·6	1·6	273	20	7·1	3·3	317	19	9·1	3·5	332	20	7·6	4·1	327	18	6·6	4·0
3·0 ,, ...	19	3·8	0·9	191	23	4·1	1·4	272	16	6·3	2·0	4	19	8·2	3·7	348	15	6·0	4·6	32	16	6·7	4·2
4·0 ,, ...	17	3·8	1·5	219	20	4·5	1·9	280	8	5·3	3·2	51	16	5·9	2·0	18	5	4·6	2·3	3	11	5·9	3·7
5·0 ,, ...	15	6·3	4·1	256	18	6·3	4·8	259	5	4·6	4·1	82	15	5·0	2·2	69	2	5·3	2·7	57	7	3·6	1·4
6·0 ,, ...	13	6·8	5·8	241	17	7·6	6·7	256	2	5·0	3·9	105	13	4·6	1·7	67	2	6·0	6·0	84	3	3·5	0·9
7·5 ,, ...	10	7·7	5·6	234	13	8·4	9·2	256					11	6·0	5·1	86	2	7·5	7·3	83	2	6·0	5·7
9·0 ,, ...	8	8·1	6·0	240	7	10·9	10·6	247					9	7·4	6·9	95	1	5·0	5·0	95			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

SEPTEMBER 1950

STATION	JAGDALPUR								JAMSHEDPUR								JHARSUGUDA							
Time in I.S.T.	0730				1430				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·1	0·6	245	30	2·1	6·6	326	30	2·3	0·1	230	30	2·6	1·4	95	30	0·8	0·3	125	30	0·6	0·1	115
0·15 a. g. ...	30	3·3	1·2	284	29	5·0	1·8	338	29	3·3	0·3	263	30	3·7	1·7	81	27	4·6	0·9	113	28	3·3	0·8	66
0·6 a.s.l. ...	30	2·1	0·8	282	29	3·7	1·2	335	28	4·4	0·5	44	30	4·2	2·2	103	27	6·2	0·7	172	28	5·2	0·7	11
1·0 ,, ...	29	5·5	2·4	336	29	5·5	2·4	350	24	4·7	2·2	360	27	4·5	1·6	107	26	6·0	1·1	354	27	6·1	2·4	6
1·5 ,, ...	26	6·6	3·8	5	28	6·0	3·0	002	23	4·4	1·7	21	24	4·2	0·6	15	25	5·6	1·9	354	25	6·3	4·1	11
2·0 ,, ...	24	6·6	5·1	19	26	6·7	3·4	013	17	4·1	2·1	12	20	4·1	1·3	358	20	5·1	1·8	14	22	5·4	3·7	14
2·5 ,, ...	22	6·5	4·5	26	23	6·3	3·6	029	16	4·5	2·3	8	17	4·5	2·1	345	18	4·7	1·3	16	21	5·7	3·6	15
3·0 ,, ...	21	6·7	3·9	24	21	6·6	3·5	031	16	4·3	0·8	344	15	4·5	2·5	328	12	4·8	1·6	105	19	5·6	2·7	10
4·0 ,, ...	17	6·2	3·5	43	18	6·4	3·0	082	11	4·3	1·6	227	10	3·8	1·6	354	4	4·1	2·9	134	14	3·7	1·8	97
5·0 ,, ...	15	6·0	4·4	76	12	6·3	3·7	095	7	3·8	2·0	161	10	4·1	2·4	29					9	4·5	3·0	119
6·0 ,, ...	15	6·0	4·6	79	10	6·3	5·2	095	6	5·1	3·0	126	9	4·1	2·1	48					6	5·5	3·8	91
7·5 ,, ...	10	7·0	6·8	95	7	7·6	7·5	094	4	6·6	5·9	112	4	3·5	3·0	18					2	4·3	4·1	132
9·0 ,, ...	7	7·8	7·6	108	7	8·2	8·0	98	2	5·0	4·9	129	3	5·7	5·0	127					1	8·5	8·5	115

STATION	JHARSUGUDA				JODHPUR								JABALPUR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·0	0·1	275	30	2·2	1·0	266	30	2·2	1·3	271	30	2·6	1·1	243	30	1·0	0·6	160	30	1·1	0·6	162
0·15 a. g. ...	29	3·3	0·4	294	30	7·9	5·0	243	28	5·4	4·3	249	30	5·4	2·8	255	27	4·5	1·5	215	28	3·7	1·4	214
0·6 a.s.l. ...	29	3·8	1·0	329	29	9·1	5·6	240	28	7·1	5·5	262	30	5·1	2·4	248	27	4·9	1·3	218	28	4·4	1·3	239
1·0 ,, ...	28	4·5	1·3	359	28	7·4	3·3	328	26	5·5	3·5	253	29	4·8	2·3	242	25	4·8	1·3	314	27	6·8	1·5	267
1·5 ,, ...	23	5·6	2·5	359	24	6·3	0·7	295	25	4·6	0·5	263	29	5·1	0·6	254	25	4·6	1·9	331	25	5·5	2·4	322
2·0 ,, ...	18	6·2	3·7	12	23	4·5	1·1	41	25	4·9	2·5	57	25	4·6	0·9	350	24	4·7	2·5	343	24	5·2	2·9	349
2·5 ,, ...	18	5·7	3·1	16	23	5·2	2·1	38	25	5·2	2·4	67	24	4·9	1·5	26	22	5·3	2·9	341	22	5·0	2·3	359
3·0 ,, ...	14	6·9	3·6	9	23	5·5	3·4	42	23	5·8	3·4	61	21	4·9	1·3	54	17	4·6	2·2	314	22	5·1	1·9	346
4·0 ,, ...	9	4·2	0·7	13	5	7·1	6·4	56	22	5·6	3·1	72	16	4·7	1·6	214	7	4·0	0·9	317	20	5·1	1·0	257
5·0 ,, ...	8	4·9	1·9	143	1	11·5	11·5	180	18	6·4	1·3	189	14	6·4	4·1	224	2	4·0	1·1	227	18	5·3	2·4	196
6·0 ,, ...	7	5·7	2·7	130					13	8·9	6·8	234	13	7·8	5·4	230					18	5·2	2·9	158
7·5 ,, ...	2	5·7	4·3	97					10	8·7	6·4	232	9	13·6	12·3	248					16	5·4	3·6	143
9·0 ,, ...	1	6·0	6·0	80					7	11·9	9·4	265	5	14·1	12·1	247					10	6·5	3·4	104

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

SEPTEMBER 1950

STATION	JABALPUR				MADHOSAGAR												MADRAS						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	1·6	0·6	343	30	3·4	1·2	205	30	3·4	0·8	216	30	3·1	0·3	342	30	3·5	3·1	240	30	2·9	2·7
0·15 a.g. ...	30	4·1	1·0	323	27	6·6	1·8	245	28	6·1	2·5	300	29	5·7	0·9	331	30	7·2	6·3	241	30	7·5	7·0
0·6 a.s.l. ...	30	4·3	1·1	321	25	7·2	3·2	255	24	6·7	3·2	299	29	6·1	1·0	004	30	8·6	7·5	263	30	10·4	9·8
1·0 ,, ...	30	5·2	0·3	351	25	6·9	2·7	252	23	6·3	3·2	298	29	6·5	0·7	06	30	9·4	8·2	283	30	10·5	9·5
1·5 ,, ...	28	5·4	1·1	5	25	6·9	2·5	266	23	5·8	2·8	322	29	6·6	1·2	340	29	9·2	8·1	296	30	9·5	8·2
2·0 ,, ...	27	5·2	2·8	358	22	5·2	1·8	314	22	5·7	2·4	333	28	7·1	1·3	296	28	8·3	7·1	300	29	8·4	7·0
2·5 ,, ...	25	5·6	2·3	352	18	4·2	2·7	337	22	6·1	2·1	330	24	6·6	2·3	310	23	8·3	6·8	302	29	8·5	7·1
3·0 ,, ...	22	5·0	2·0	339	17	4·1	2·5	321	22	6·3	2·0	333	23	6·3	3·0	303	15	8·4	7·2	295	27	8·4	6·7
4·0 ,, ...	17	5·4	1·9	279	6	4·6	2·8	247	20	6·0	3·2	274	22	6·1	3·9	275	5	5·9	3·8	320	20	7·8	5·3
5·0 ,, ...	10	5·3	2·5	261	3	5·2	4·6	232	19	6·4	5·3	254	18	7·5	7·1	261					18	5·6	3·0
6·0 ,, ...	7	4·3	1·3	225					18	7·4	6·6	245	17	9·5	9·1	244					16	5·4	1·8
7·5 ,, ...	2	5·3	4·9	158					16	9·3	8·3	241	12	12·4	11·9	244					7	7·4	4·9
9·0 ,, ...	1	9·5	9·5	190					15	9·1	8·2	243	9	10·8	10·3	236					4	7·0	6·1

STATION	MADRAS				MALEGAON												MANGALORE						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	5·1	2·0	279	30	2·9	2·7	261	30	2·0	1·9	239	30	3·9	2·2	291	30	2·5	1·0	264	30	1·9	0·5
0·15 a.g. ...	30	7·0	3·5	274	28	6·7	6·0	274	29	4·9	3·9	280	30	5·7	3·2	290	23	5·4	3·3	264	25	4·3	2·9
0·6 a.s.l. ...	30	6·1	5·1	283	28	6·7	6·0	274	29	4·9	3·9	280	30	5·7	3·2	291	20	6·7	5·9	286	22	8·1	7·1
1·0 ,, ...	30	7·5	6·5	287	28	6·8	5·0	292	29	6·2	4·2	296	30	5·1	3·2	288	13	8·5	7·4	293	17	9·2	8·7
1·5 ,, ...	30	8·9	7·5	291	28	7·1	3·6	300	26	5·9	2·7	339	25	5·5	3·8	291	7	7·7	6·7	300	11	9·5	8·3
2·0 ,, ...	30	9·7	8·2	297	23	5·1	1·8	317	22	3·9	0·5	318	20	5·1	3·8	291	5	7·8	6·5	297	6	8·5	6·0
2·5 ,, ...	28	10·2	8·8	297	21	3·5	0·1	21	21	3·2	0·2	39	12	3·6	1·9	287	3	8·0	5·1	282	3	6·7	0·4
3·0 ,, ...	27	9·8	8·6	292	20	3·5	0·2	194	21	2·8	0·3	192	8	3·4	1·3	313	2	5·3	1·2	286	3	6·8	1·9
4·0 ,, ...	23	8·3	6·8	297	14	4·1	0·7	203	15	4·0	0·1	165	2	2·5	1·7	274					1	3·5	3·5
5·0 ,, ...	18	6·3	3·7	306					13	5·6	1·2	80	1	8·5	8·5	240					1	5·0	5·0
6·0 ,, ...	14	5·7	0·7	27					10	6·1	2·3	100									1	6·0	6·0
7·5 ,, ...	8	6·6	6·1	85					6	6·5	3·1	109											
9·0 ,, ...	6	8·3	8·1	104					5	8·7	3·9	111											

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

SEPTEMBER 1950

STATION	MANGALORE				MASULIPATAM												MINICOY							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	2·7	2·2	275	30	1·7	1·5	255	30	1·9	1·9	272	30	2·3	1·8	292	30	5·7	5·3	284	30	5·3	4·7	284
0·15 a.g. ...	27	5·4	4·6	286	28	6·4	5·0	260	28	7·0	6·0	271	28	5·5	4·1	286	28	9·1	8·4	289	29	8·3	7·8	284
0·6 a.s.l. ...	26	8·4	7·9	284	28	7·9	5·9	282	28	9·6	8·1	289	28	6·6	5·6	295	28	11·1	10·3	289	28	11·0	10·4	285
1·0 ,, ...	21	8·7	8·0	288	28	8·4	6·0	292	25	9·6	7·7	302	28	8·4	7·0	298	27	12·0	11·5	293	27	12·1	11·6	291
1·5 ,, ...	13	8·0	6·6	291	26	9·0	6·0	301	25	7·6	5·7	314	28	9·2	7·3	304	24	11·7	11·4	294	23	11·6	11·2	292
2·0 ,, ...	7	6·1	4·0	302	23	8·4	6·0	306	24	7·2	4·9	317	28	9·0	6·7	308	18	9·9	9·5	295	22	10·2	9·8	290
2·5 ,, ...	4	6·3	2·3	293	18	7·7	5·7	315	22	7·7	5·0	318	25	8·3	6·2	305	17	10·1	9·7	286	18	11·3	8·7	287
3·0 ,, ...	2	5·0	3·8	56	15	6·6	4·7	327	19	8·0	4·5	321	23	8·2	6·2	299	14	8·9	8·4	281	18	8·9	8·4	284
4·0 ,, ...	2	3·0	1·6	87	9	6·3	3·1	334	16	6·7	3·1	348	20	7·9	5·7	297	7	7·7	6·2	259	10	8·1	5·7	258
5·0 ,, ...	2	5·3	5·1	78					13	5·3	0·7	35	19	6·0	2·5	325	1	2·5	2·5	275	8	4·5	1·3	93
6·0 ,, ...	2	7·0	6·5	97					10	5·9	2·8	63	15	5·8	1·9	322					8	4·9	2·9	43
7·5 ,, ...	1	9·0	9·0	100					10	6·6	5·4	77	14	6·2	1·3	24					5	9·3	8·4	19
9·0 ,, ...	1	14·0	14·0	105					7	7·4	6·9	105	12	7·1	3·0	67					3	12·2	11·9	94

STATION	MINICOY				NAGERCOIL												NAGPUR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	5·8	5·4	292	30	3·9	3·7	288	30	4·1	3·8	293	30	6·1	5·8	279	30	2·4	1·2	295	30	2·3	0·9	281
0·15 a.g. ...	30	8·6	8·2	287	29	10·5	10·4	300	30	9·3	9·2	295	30	11·1	10·7	285	30	5·5	2·1	298	29	5·0	2·3	319
0·6 a.s.l. ...	29	11·2	10·8	289	29	16·4	16·0	301	30	16·3	16·0	300	30	14·0	13·8	293	30	6·0	2·1	305	29	6·2	2·3	332
1·0 ,, ...	28	13·4	12·0	291	29	14·7	14·4	289	30	16·5	16·1	297	29	15·9	15·7	297	29	6·0	2·1	316	28	6·6	2·8	342
1·5 ,, ...	27	11·4	11·0	293	28	12·6	11·6	291	30	13·0	12·2	290	29	16·0	15·4	294	29	5·7	1·9	318	26	5·5	2·5	349
2·0 ,, ...	25	10·0	9·6	287	26	13·1	12·3	285	29	13·0	11·5	284	28	14·7	14·1	290	25	5·5	1·6	317	23	5·2	2·6	01
2·5 ,, ...	24	9·6	9·2	283	16	9·7	8·3	282	28	12·3	10·9	280	27	14·0	13·6	287	23	5·3	1·7	360	23	6·0	2·5	003
3·0 ,, ...	21	9·3	8·6	280	15	9·2	8·0	271	26	9·7	8·4	274	25	13·0	12·4	283	22	5·5	2·6	02	22	6·2	2·8	11
4·0 ,, ...	16	8·1	6·3	266					17	7·3	5·3	281	19	9·4	8·3	283	14	5·0	1·1	38	20	5·8	2·5	39
5·0 ,, ...	14	6·0	2·6	295					12	4·4	2·0	349	11	6·2	4·0	285	5	3·4	1·3	130	17	6·4	2·2	91
6·0 ,, ...	12	6·1	1·4	345					11	4·4	1·9	28	9	6·3	4·3	300	4	5·7	4·4	110	14	5·7	2·4	143
7·5 ,, ...	7	7·5	3·1	87					8	7·1	5·5	100	6	5·4	2·3	328					10	4·6	4·0	105
9·0 ,, ...	5	11·8	11·3	82					7	10·9	9·6	87	5	3·6	1·4	154					9	7·7	7·0	105

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

SEPTEMBER 1950

STATION	NAGPUR				NEW DELHI												POONA							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	2·2	0·6	300	30	2·3	0·5	143	30	2·9	0·3	155	30	3·3	0·9	331	30	1·9	1·8	275	30	2·0	2·0	271
0·15 a. g. ...	29	3·4	0·9	327	27	6·3	0·9	294	27	6·1	1·7	282	27	5·2	1·5	322	30	5·0	4·7	264	28	4·4	4·1	259
0·6 a.s.l. ...	29	3·7	1·3	324	27	6·2	0·7	273	27	7·3	1·9	262	27	5·5	1·4	302	30	3·1	2·6	257	28	2·6	2·5	253
1·0 ,, ...	28	4·1	1·9	335	27	6·8	1·4	276	26	7·6	2·5	282	27	6·6	1·1	306	30	6·5	5·7	273	28	6·2	5·1	277
1·5 ,, ...	27	4·9	1·8	343	27	7·9	2·0	309	24	8·2	3·7	298	26	7·2	2·9	303	23	7·2	5·4	280	19	6·8	2·9	286
2·0 ,, ...	24	5·2	1·9	5	23	7·9	4·0	317	24	9·5	4·1	317	25	7·4	3·9	305	21	5·5	3·8	288	17	6·3	3·0	272
2·5 ,, ...	24	5·8	3·1	6	14	6·5	3·8	323	21	9·4	5·3	323	23	7·8	4·4	304	19	3·8	1·0	308	14	4·3	1·2	259
3·0 ,, ...	22	5·3	3·2	358	11	6·3	4·0	328	21	7·9	4·0	340	23	8·2	4·5	294	14	3·6	1·1	315	10	3·3	1·1	127
4·0 ,, ...	16	5·0	2·9	339	4	6·7	5·5	325	19	6·6	3·3	304	18	8·4	7·3	294	7	3·3	1·2	303	8	4·6	1·4	88
5·0 ,, ...	14	4·6	0·5	245	1	11·0	11·0	331	19	7·5	5·7	265	17	10·4	8·8	270	1	6·0	6·0	335	6	4·6	3·2	118
6·0 ,, ...	15	5·2	1·3	158					18	11·0	9·3	246	16	10·6	9·8	254					5	4·0	2·3	114
7·5 ,, ...	14	5·0	3·5	143					13	11·2	9·9	245	14	13·4	12·6	249					4	4·0	3·5	117
9·0 ,, ...	10	6·1	5·1	118					11	5·5	14·2	244	12	16·3	15·7	253					2	6·0	6·0	112

STATION	POONA				PORT BLAIR												RAIPUR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	3·6	3·1	281	30	3·5	3·2	243	30	3·4	3·1	240	30	5·0	4·6	246	30	1·2	0·6	229	30	1·0	0·5	272
0·15 a. g. ...	29	6·2	5·3	263	27	7·5	7·2	242	27	6·5	5·9	242	29	8·4	7·8	246	26	5·2	1·3	304	28	4·3	1·9	318
0·6 a.s.l. ...	29	4·2	3·4	264	26	9·9	9·5	250	22	9·9	9·2	251	28	9·1	8·4	251	26	5·8	1·3	324	28	5·7	2·4	333
1·0 ,, ...	29	6·5	6·0	261	22	8·0	7·5	258	20	8·8	8·4	249	21	8·5	7·6	259	24	6·4	2·2	344	26	6·0	2·8	002
1·5 ,, ...	27	6·4	5·3	264	19	6·9	6·4	262	14	6·7	6·1	259	17	7·0	6·2	263	23	5·4	2·2	345	25	5·7	3·1	018
2·0 ,, ...	18	5·4	2·9	268	11	4·5	4·2	266	11	5·5	5·0	238	14	6·7	6·1	268	23	5·5	2·5	007	22	5·8	4·1	015
2·5 ,, ...	12	5·1	1·4	232	6	5·2	4·7	264	11	5·1	4·4	270	12	6·6	5·8	260	18	6·2	3·5	007	20	6·6	4·6	016
3·0 ,, ...	10	3·4	1·6	189	5	5·5	3·7	254	10	5·3	3·7	261	9	4·8	3·3	241	17	5·9	2·6	005	18	7·2	5·2	013
4·0 ,, ...	7	2·7	2·1	155					8	4·4	1·5	206	6	4·3	2·7	186	6	7·5	2·9	039	17	5·6	2·8	007
5·0 ,, ...	4	4·1	3·5	153					7	5·4	2·1	178	1	2·0	2·0	135	3	9·7	7·6	174	13	5·3	0·8	065
6·0 ,, ...	4	3·4	2·5	135					6	5·5	1·8	69					2	25·3	19·2	213	13	5·0	2·0	108
7·5 ,, ...	1	5·0	5·0	130					1	6·5	6·5	70									8	5·7	5·0	113
9·0 ,, ...	1	3·5	3·5	120					1	13·5	13·5	105									5	7·0	6·6	098

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

SEPTEMBER 1950

STATION	RAIPUR				TEZPUR												TIRUCHIRAPALLI							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·9	0·3	305	30	0·8	0·2	119	30	7·5	0·2	106	30	1·1	0·2	211	30	3·9	3·9	271	30	3·5	3·3	273
0·15 a.g. ...	30	4·7	0·7	009	26	3·8	0·9	171	28	3·0	0·6	149	30	3·2	0·7	189	30	9·2	9·1	272	30	8·2	8·0	274
0·6 a.s.l. ...	30	3·9	0·8	318	24	6·4	1·4	243	25	4·9	1·4	145	30	4·9	1·3	210	30	13·8	13·7	272	30	12·4	12·1	276
1·0 ,, ...	27	3·9	1·7	348	23	7·0	1·4	237	20	6·4	1·4	108	30	6·3	2·4	231	30	12·2	11·8	277	30	12·1	11·5	278
1·5 ,, ...	25	5·6	2·3	351	19	7·2	1·7	247	18	7·6	1·2	118	29	6·9	3·8	237	29	9·8	8·7	280	30	10·0	9·0	279
2·0 ,, ...	23	6·0	3·2	009	14	5·7	0·8	229	14	7·2	2·8	102	28	7·6	4·5	238	28	9·4	8·3	283	30	9·7	8·5	283
2·5 ,, ...	23	6·8	3·9	360	11	5·8	0·6	188	9	6·7	3·1	109	27	7·9	5·4	243	21	7·7	6·3	290	26	8·6	7·3	288
3·0 ,, ...	23	6·5	3·8	015	9	6·3	1·8	210	9	8·2	3·4	125	22	7·2	5·0	242	20	6·7	5·6	292	26	7·4	6·2	291
3·5 ,, ...	18	5·6	2·4	023	5	6·3	5·4	243	5	4·4	2·6	237	18	6·5	4·4	257	3	6·3	3·6	213	18	5·2	3·5	287
4·0 ,, ...	15	4·9	1·3	074					3	4·2	3·4	213	16	6·1	3·3	252					11	4·9	2·6	352
4·5 ,, ...	11	3·7	1·8	108					3	5·3	4·4	243	13	6·6	4·9	260					10	4·7	2·2	59
5·0 ,, ...	8	3·7	2·3	091					3	4·0	3·4	263	10	5·9	4·3	235					8	7·9	6·6	84
5·5 ,, ...	7	4·1	3·0	102					2	5·7	1·4	188	9	5·9	3·8	246					5	9·0	8·8	89

STATION	TIRUCHIRAPALLI				TRIVANDRUM				UDAIPUR												VENGURLA			
Time in I.S.T.	1430				0730				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	5·0	4·5	282	30	1·9	1·7	331	30	0·9	0·4	259	30	1·0	0·6	286	30	1·7	0·7	226	30	1·3	1·1	279
0·15 a.g. ...	30	7·7	7·3	280	28	7·0	6·6	327	29	4·1	2·6	291	29	3·4	2·3	307	28	3·4	1·2	269	17	5·5	3·9	306
0·6 a.s.l. ...	30	8·2	8·0	274	26	12·0	11·4	309													17	7·5	6·2	304
1·0 ,, ...	30	9·3	9·1	271	24	12·7	12·2	306	29	4·4	2·6	282	29	4·6	2·8	313	28	3·7	1·0	262	15	7·4	6·4	303
1·5 ,, ...	30	10·2	9·6	269	18	11·9	11·3	301	28	5·1	1·1	279	26	4·3	0·9	344	27	3·7	1·4	325	13	6·3	4·1	291
2·0 ,, ...	30	10·7	9·7	271	13	10·8	9·4	298	26	5·1	0·6	79	23	3·9	1·6	87	24	3·5	1·0	354	12	6·1	1·5	288
2·5 ,, ...	29	10·3	9·4	277	10	6·7	5·1	302	22	4·3	1·4	93	23	5·0	2·1	82	23	4·4	0·4	349	10	5·7	1·0	36
3·0 ,, ...	28	9·6	8·6	283	9	5·5	4·8	293	22	4·6	1·3	83	23	6·1	2·4	86	21	5·0	0·7	203	8	4·7	1·2	314
3·5 ,, ...	23	6·7	5·2	296	4	6·3	4·5	293	6	5·6	1·4	38	22	5·9	1·2	183	15	7·2	6·1	239	4	3·9	3·5	111
4·0 ,, ...	18	6·8	3·0	295	1	3·0	3·0	325	2	4·5	2·5	19	19	6·7	3·0	228	12	11·3	10·5	250	1	2·0	2·0	135
4·5 ,, ...	14	6·5	0·9	023	1	4·5	4·5	315					17	7·8	4·0	229	12	11·2	9·9	243				
5·0 ,, ...	9	8·7	7·6	086	1	2·5	2·5	270					13	8·1	3·9	199	9	12·2	10·9	240				
5·5 ,, ...	4	9·5	9·5	105	1	4·5	4·5	50					7	6·6	3·8	216	6	11·7	11·7	236				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

SEPTEMBER 1950

STATION	VENGURLA								VERAVAL												VISAKHAPATNAM			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	0·9	0·6	296	30	2·7	2·3	267	30	4·3	3·7	270	30	2·3	2·0	282	30	5·0	4·7	273	30	0·9	0·3	240
0·15 a. g. ...	22	4·5	1·5	310	21	6·0	5·4	277	30	6·5	5·3	277	29	5·7	4·8	290	30	7·1	6·8	272	28	3·4	2·4	259
0·6 a.s.l. ...	22	7·5	5·6	297	20	6·7	5·8	293	28	7·3	6·3	275	29	7·0	6·4	282	29	6·0	5·5	275	27	5·1	2·9	281
1·0 ,, ...	19	7·6	6·1	299	18	6·7	5·6	291	25	5·3	3·9	259	27	5·7	4·9	270	28	4·9	3·2	280	25	6·6	3·8	301
1·5 ,, ...	16	7·0	3·8	304	12	5·8	3·5	300	17	3·8	1·1	172	22	4·8	1·8	226	25	4·0	1·0	251	25	6·1	3·1	313
2·0 ,, ...	13	5·5	1·1	325	7	4·6	1·2	33	16	3·7	0·6	199	16	5·4	0·8	140	21	4·0	1·8	192	21	5·7	3·1	327
2·5 ,, ...	10	5·4	0·2	74	5	3·9	3·2	107	16	4·1	1·2	280	14	5·0	1·0	150	21	4·4	2·2	207	18	6·1	3·3	341
3·0 ,, ...	9	5·0	1·0	235	4	3·1	2·5	113	14	4·8	1·8	261	15	6·3	2·0	170	20	5·9	2·7	213	16	5·2	2·4	356
4·0 ,, ...	6	4·5	2·1	351	3	2·0	1·1	132	9	5·9	2·6	237	13	7·2	4·2	230	18	6·8	4·0	220	6	4·8	2·5	73
5·0 ,, ...	3	4·8	4·4	84	3	2·8	2·2	97					11	6·9	4·9	234	18	6·1	2·3	221				
6·0 ,, ...	3	5·5	5·4	90	3	3·8	3·6	96					9	4·7	3·7	243	18	6·0	1·4	223				
7·5 ,, ...	2	4·0	3·7	75	1	6·5	6·5	70					5	4·4	3·5	233	15	3·8	0·6	252				
9·0 ,, ...	2	8·0	8·0	111									4	3·9	2·3	222	13	4·1	0·9	134				

STATION	VISAKHAPATNAM							
Time in I.S.T.	0730				1430			
Height in Km.	n	V	v	D	n	V	v	D
Surface ...	30	1·1	0·5	285	31	5·7	4·2	204
0·15 a. g. ...	30	3·2	1·5	275	31	7·4	5·0	207
0·6 a.s.l. ...	30	4·8	2·0	281	30	6·0	4·3	246
1·0 ,, ...	29	5·2	2·3	318	29	7·4	5·2	275
1·5 ,, ...	29	6·0	2·9	335	27	9·0	8·4	289
2·0 ,, ...	25	5·5	3·6	326	25	10·8	9·6	290
2·5 ,, ...	24	6·0	3·3	326	21	10·2	9·3	282
3·0 ,, ...	21	6·0	3·1	334	19	10·8	8·6	277
4·0 ,, ...	18	5·3	1·2	339	6	7·8	2·8	287
5·0 ,, ...	11	6·0	3·6	73	5	6·8	0·9	280
6·0 ,, ...	6	5·3	3·6	95	3	6·0	5·7	104
7·5 ,, ...	1	3·5	3·5	175	2	7·0	6·5	86
9·0 ,, ...	1	9·0	9·0	125	2	13·0	12·9	82

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

SEPTEMBER 1950

ight in Km.	n	V	v	D	Height in Km.	n	V	v	D	Height in Km.	n	V	v	D	Height in Km.	n	V	v	D
		AHMEDABAD				ANANTAPUR *(Contd.)*					BOMBAY					DIBRUGARH *(Contd.)*				
10	7	5·9	2·3	243	11	5	11·1	10·7	95	10	4	4·9	3·7	107	17	2	5·5	5·5	182
11	4	4·7	2·7	232	12	3	13·8	12·9	90	11	3	7·3	6·7	119	18	1	4·0	4·0	185
12	3	5·0	2·8	250	13	2	16·0	15·3	80	12	2	9·7	9·5	125			GADAG		
13	1	10·5	10·5	200	14	1	23·0	22·0	105	13	1	12·5	12·5	130	10	3	9·1	8·5	92
14	1	13·0	13·0	175	15	1	22·0	22·0	110			CALCUTTA			11	1	11·5	11·5	70
15	1	22·5	22·5	200	16	1	25·5	25·5	130	10	3	4·8	2·1	125			GAYA		
16	1	31·5	31·5	190			ASANSOL			11	2	6·0	4·3	129	10	4	7·1	2·6	279
		ALLAHABAD			10	2	5·0	2·1	215	12	2	9·0	5·3	156	11	2	6·0	5·9	269
10	14	9·1	7·5	236	11	1	8·0	8·0	230	13	2	9·7	7·6	131	12	2	9·0	8·0	230
11	10	8·8	6·9	231	12	1	12·0	12·0	210	14	1	13·0	12·0	110	13	1	9·0	9·0	165
12	8	8·5	5·7	224			BANGALORE			15	1	12·0	12·0	110			GOPALPUR		
13	6	9·1	4·6	230	10	1	13·5	13·5	95	16	1	10·0	10·0	95	10	4	9·0	8·8	99
14	4	13·0	10·8	237	11	1	17·0	17·0	100	17	1	8·0	8·0	80	11	3	10·5	10·2	103
15	3	14·1	13·2	264	12	1	18·0	18·0	105	18	1	11·0	11·0	60	12	3	13·8	13·5	103
16	3	15·5	15·0	243			BAREILLY			19	1	15·0	15·0	85	13	2	14·0	13·5	105
17	2	20·7	19·9	245	10	3	21·5	21·5	255			COCHIN			14	2	16·7	15·6	100
18	2	33·3	32·1	256	11	1	24·0	24·0	260			(Willingdon Island)			15	2	19·3	18·5	106
19	1	16·0	16·0	210			BHAGALPUR			10	2	11·3	11·3	95	16	1	17·0	17·0	125
20	1	19·5	19·5	220	10	8	7·7	5·3	167	11	2	15·0	14·9	105			GORAKHPUR		
21	1	18·0	18·0	220	11	1	9·0	9·0	230	12	2	17·3	17·3	94	10	8	9·1	6·3	244
22	1	18·5	18·5	235	12	1	9·0	9·0	270			COOCH BEHAR			11	7	10·6	6·9	252
23	1	22·0	22·0	230	13	1	6·0	6·0	285	10	3	8·2	8·2	265	12	5	11·2	6·5	253
24	1	20·5	20·5	235	14	1	9·0	9·0	250			CUTTACK			13	2	12·5	12·2	261
25	1	22·5	22·5	230			BHOPAL			10	2	17·0	16·8	105			HYDERABAD (Dn.)		
26	1	30·5	30·5	230	10	5	8·2	4·4	180			DEOLALI			10	8	7·7	7·5	100
27	1	32·5	32·5	225	11	3	7·8	6·6	197	10	2	6·7	6·4	136	11	6	9·7	9·3	103
28	1	37·5	37·5	215	12	2	10·5	9·5	188	11	2	5·0	4·7	111	12	6	13·7	12·5	95
29	1	40·5	40·5	220	13	2	10·7	10·3	177	12	2	10·5	6·9	80	13	3	15·1	15·1	106
30	1	43·0	43·0	225	14	1	4·5	4·5	60	13	1	14·0	14·0	120	14	1	17·5	17·5	105
31	1	46·0	46·0	235	15	1	4·0	4·0	55	14	1	21·0	21·0	120			JAGDALPUR		
32	1	49·5	49·5	230	16	1	6·0	6·0	180	15	1	21·5	21·5	125	10	12	8·8	8·0	104
33	1	64·0	64·0	230	17	1	6·5	6·5	240	16	1	15·0	15·0	125	11	8	9·9	9·4	99
		AMBALA			18	1	9·0	9·0	245	17	1	19·0	19·0	135	12	6	12·1	12·0	103
10	7	19·2	18·9	245	19	1	12·0	12·0	245	18	1	24·0	24·0	125	13	3	12·7	12·6	107
11	5	13·6	13·3	250			BHUJ			19	1	25·0	25·0	125	14	2	13·0	13·0	118
12	4	15·3	14·3	240	10	12	9·4	2·6	245			DIBRUGARH			15	1	17·5	17·5	110
13	3	18·0	18·9	242	11	5	12·3	5·1	226	10	8	8·5	6·2	277	16	1	19·0	19·0	95
14	2	20·7	20·5	256	12	3	13·8	6·6	230	11	7	8·1	6·5	283	17	1	21·0	21·0	95
15	2	14·7	14·5	251	13	2	13·5	1·9	64	12	5	9·1	7·8	270	18	1	26·0	26·0	95
16	2	19·3	19·3	242	14	1	9·0	9·0	205	13	4	11·1	9·9	285			JAMSHEDPUR		
17	1	6·0	6·0	250			BIKANER			14	2	8·3	8·0	290	10	2	6·5	5·6	133
		ANANTAPUR			10	3	13·3	13·1	246	15	2	4·5	4·5	269	11	1	9·5	9·5	130
10	7	9·1	8·5	82						16	2	4·3	2·?	262					

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

SEPTEMBER 1950

Height in Km.	n	V	v	D
		JHARSUGUDA		
10	1	8·5	8·5	110
		JODHPUR		
10	11	15·5	9·8	273
11	9	12·3	9·7	260
12	6	14·1	11·1	261
13	6	14·8	11·6	261
14	3	5·0	3·1	284
15	2	6·5	4·6	271
16	1	5·0	5·0	220
17	1	6·5	6·5	135
18	1	2·0	2·0	205
19	1	16·0	16·0	215
20	1	21·0	21·0	220
		JABALPUR		
10	8	7·7	3·9	133
		MADHOSAGAR		
10	19	11·5	10·5	236
11	13	12·5	11·7	230
12	11	13·9	13·3	231
13	11	13·3	12·8	227
14	8	12·5	11·9	223
15	6	9·4	8·3	221
16	4	8·2	7·4	217
17	4	8·4	6·7	167
18	4	5·0	2·2	91
19	3	3·7	3·1	147
20	2	3·3	3·0	134
21	2	3·3	3·3	122
22	1	8·0	8·0	20
23	1	10·5	10·5	65
24	1	13·0	13·0	20
25	1	4·5	4·5	330
		MADRAS		
10	7	11·3	10·3	90
11	3	14·0	13·9	100
12	2	15·7	15·5	98
13	2	23·0	22·8	108
14	1	30·5	30·5	110
15	1	46·0	46·0	100
16	1	30·5	30·5	110
17	1	20·0	20·0	85

Height in Km.	n	V	v	D
		MALEGAON		
10	5	7·3	4·4	108
		MANGALORE		
10	1	13·0	13·0	90
11	1	13·5	13·5	100
12	1	15·5	15·5	105
		MASULIPATAM		
10	17	8·7	6·9	99
11	10	9·6	8·3	101
12	7	13·7	13·6	95
13	6	15·3	14·7	98
14	4	19·8	19·7	104
15	2	25·5	25·1	101
16	1	26·0	26·0	100
		MINICOY		
10	6	18·0	17·9	105
11	4	24·0	23·6	97
12	3	32·5	32·0	94
13	2	46·3	46·3	85
14	1	40·5	40·5	90
15	1	46·5	46·5	90
		NAGERCOIL		
10	8	12·0	11·6	93
		NAGPUR		
10	17	7·1	5·8	100
11	11	7·2	6·1	105
12	6	9·1	7·7	125
13	4	11·6	8·5	122
14	3	15·8	12·7	103
15	3	11·1	10·9	112
16	1	16·0	16·0	95
		NEW DELHI		
10	18	16·9	15·9	248
11	15	15·3	13·3	246
12	8	17·1	16·4	246
13	6	16·8	14·0	231
14	6	12·1	9·5	221
15	5	11·6	6·9	221
16	3	8·5	5·1	239
17	3	9·0	5·5	182
18	2	8·7	7·7	199
19	1	6·5	6·5	250

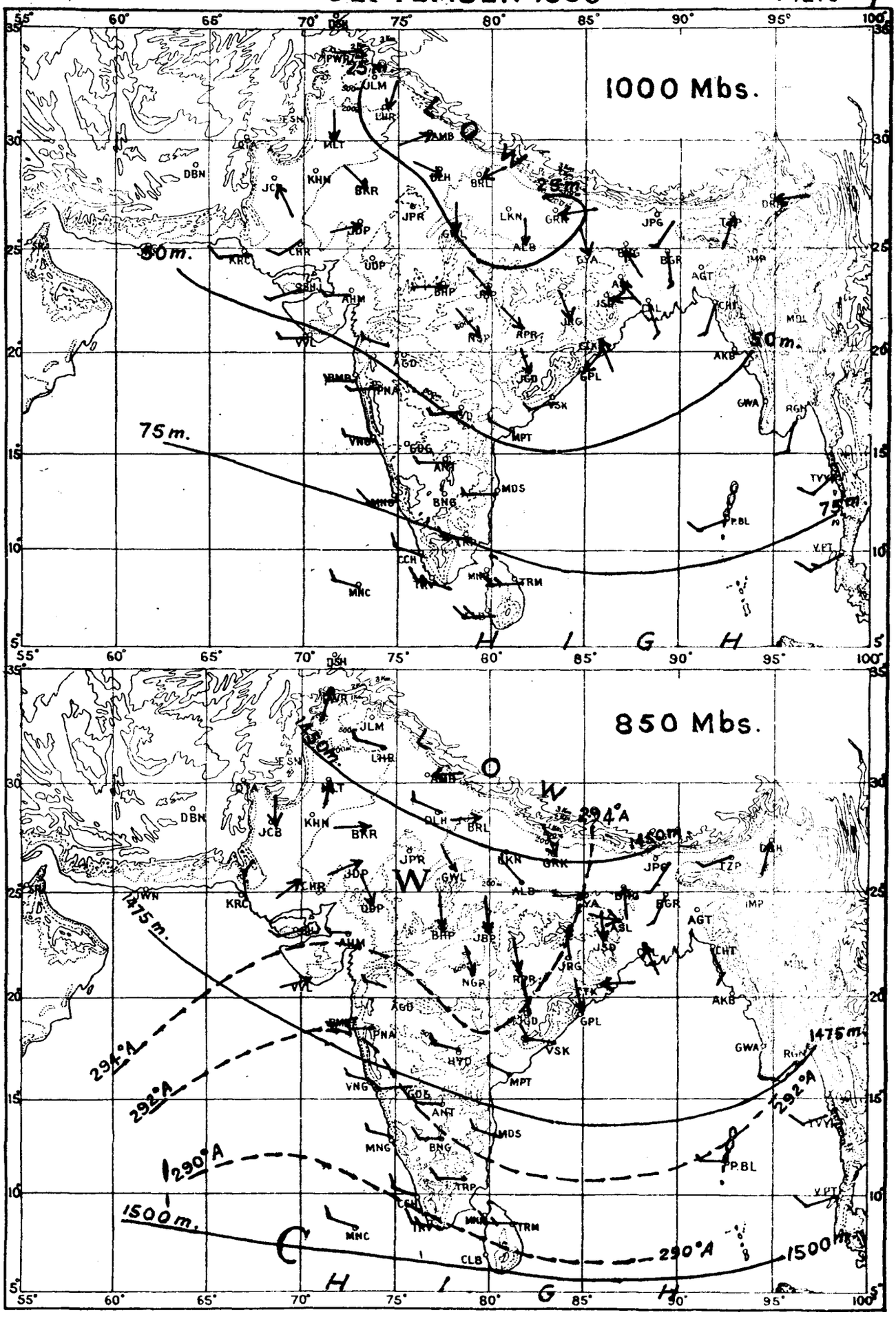
Height in Km.	n	V	v	D
		POONA		
10	2	8·7	8·7	109
11	1	7·0	7·0	95
		RAIPUR		
10	9	5·8	4·2	102
11	5	7·7	7·2	101
12	5	9·0	7·6	106
13	5	10·7	9·9	108
14	5	11·6	10·0	109
15	4	15·1	14·7	100
16	2	14·7	14·3	87
		TEZPUR		
10	9	7·7	3·7	276
11	7	9·0	4·5	283
12	3	11·8	6·8	285
13	3	13·0	6·8	291
14	3	13·3	8·4	282
15	3	12·0	5·9	289
16	3	15·0	8·4	294
17	2	19·0	19·0	286
18	2	17·3	17·3	285
19	2	20·3	15·1	297
20	2	22·0	10·7	286
21	2	24·3	14·9	284
22	2	24·3	13·3	265
23	1	16·0	16·0	85
		TIRUCHIRAPALLI		
10	7	11·7	11·3	93
		UDAIPUR		
10	9	9·8	8·4	245
11	3	11·7	10·0	264
12	3	9·8	8·6	244
13	1	4·0	4·0	274
14	1	7·0	7·0	235
		VENGURLA		
10	2	6·1	5·9	116
		VERAVAL		
10	15	5·3	3·4	144
11	9	4·9	3·3	123
12	7	6·1	4·8	152
13	7	9·3	8·6	145
14	4	13·5	13·0	157
15	2	18·5	18·5	150

Height in Km.	n	V	v	D
		VERAVAL *(Contd.)*		
16	1	21·0	21·0	13
17	1	25·5	25·5	12
		VISAKHAPATNAM		
10	1	19·0	19·0	10
11	1	27·0	27·0	9
12	1	25·0	25·0	9

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

SEPTEMBER 1950

Plate I



RESULTANT WIND —— = 5 Knots; —— = 10 Knots; —— = 50 Knots.

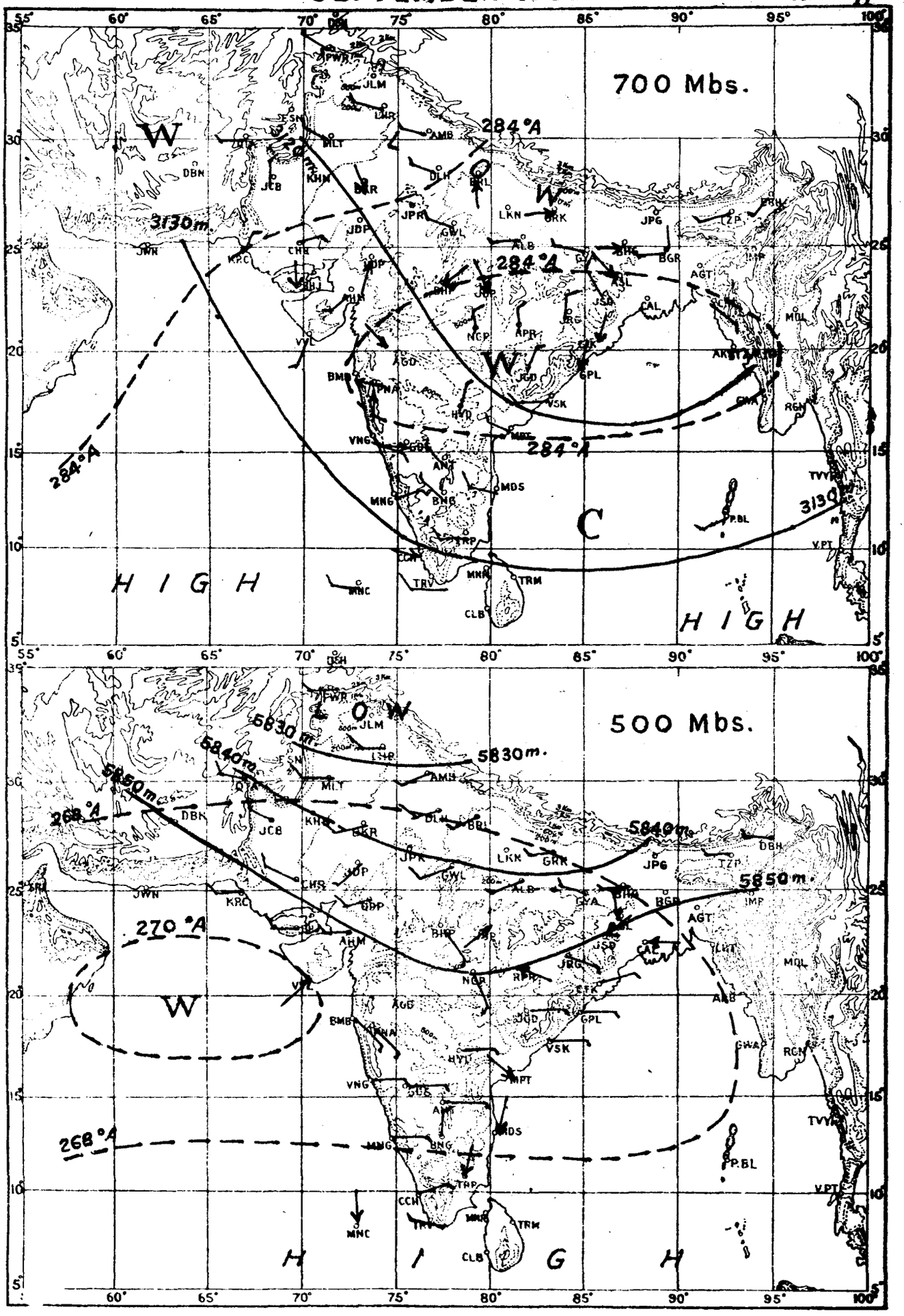
- - - - - Isotherms in degrees absolute. ——— Contours in geopotential metres.

G. P. Z. P. POONA, 53.

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

SEPTEMBER 1950

Plate II



RESULTANT WIND ——= 5 Knots, ——= 10 Knots, ——= 50 Knots.

------ Isotherms in degrees absolute. ——— Contours in geopotential metres.

G.P.Z. P.POONA, 53.

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INDIA WEATHER REVIEW, 1950

MONTHLY WEATHER REPORT

OCTOBER

Published by authority of the Government of India

CHIEF FEATURES :—(i) Weak northeast monsoon in the south of the Peninsula in the second half of the month, and (ii) formation and movement of two depressions, one in the Arabian Sea and the other in the Bay of Bengal.

The southwest monsoon completely withdrew from the country by the 2nd October and the seasonal low established itself over the south Bay of Bengal by the 12th. Weather became unsettled in the Arabian Sea off the Malabar-Kanara coast on the 4th and a shallow depression formed there with central region within one degree of Lat. 13°N., Long. 72°E. on the morning of the 8th. The shallow depression moved rapidly northeastwards and filled up over south Deccan (Desh) by the 10th. It was responsible for widespread rain in Travancore-Cochin between the 4th and 11th with locally heavy falls on the 8th. Widespread or local thunder rain also occurred in Mysore, Rayalaseema, Malabar and South Kanara, south Hyderabad and Deccan (Desh) during the period. A trough of low pressure off the Kanara coast caused local showers in the Konkan, Deccan (Desh) and Madhya Pradesh towards the end of the first fortnight.

The seasonal low over the south Bay of Bengal gradually became more marked after the 12th and a depression formed there by the morning of the 17th centred about 150 miles southeast of Madras. Moving northwards initially and northeastwards later, it passed inland into Eastern Pakistan across the Sunderbans coast on the 21st night and became unimportant by the 23rd. In association with these developments, the northeast monsoon set in over the south of the Peninsula by the 16th October and widespread rain occurred in the Madras State, Travancore-Cochin and Mysore on the 17th and 18th. Nellore in coastal Andhradesa had 23″ of rain during the 48 hours ending at 0830 hrs. I.S.T. of the 18th. Widespread rain also occurred successively in Orissa, West Bengal, Eastern Pakistan and Assam between the 19th and 23rd. According to newspaper reports, the heavy downpours in the Eastern Himalayas caused several hill streams in Assam to be in spate. Many houses were washed away and crops were damaged in the Sadiya Frontier tract.

After the movement of the depression into Eastern Pakistan, the northeast monsoon weakened in the south of the Peninsula and remained weak there till the end of the month. Assam, Gangetic West Bengal and Orissa had a further spell of wet weather during the last five days of the month under the influence of a low pressure wave which moved westnorthwestwards from Tenasserim to the Circars coast.

Two western disturbances affected the country during the month. The first one moved across the North-West Frontier Province and Kashmir and caused light showers in Kashmir on the 1st and 2nd. The second disturbance moved rapidly from north Baluchistan to the hills of the Punjab (I) in the second week and produced a few showers in the Punjab (P) on the 14th and in Kashmir on the 14th and the 15th.

There was little or no rain in northwest India, Uttar Pradesh, Bihar, Vindhya Pradesh and Saurashtra and Kutch during the month. It is reported that the absence of rainfall in Bihar and Uttar Pradesh affected the crops in those regions.

Night temperatures were 5°–10° F below normal over the northern half of the Peninsula and in the central parts of the country on most of the days during the second fortnight of the month.

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The total rainfall for the month was in slight excess in coastal Andhradesa and Rayalaseema, normal in Assam, Deccan (Desh), south Hyderabad, Malabar and South Kanara and in Travancore-Cochin and in slight to moderate defect in the Bay Islands, West Bengal, Orissa, north Hyderabad, Tamilnad and Mysore. It was in large defect elsewhere except in northwest India, Gujarat and Saurashtra and Kutch where there was no rain. Averaged over the plains of India the rainfall was 31% in defect.

Maximum temperature was normal throughout the country except in Rayalaseema where it was below normal.

Minimum temperature was below normal in the Punjab (I), east Rajasthan, Madhya Bharat, Vindhya Pradesh, east Madhya Pradesh and Deccan (Desh) and normal elsewhere.

The relative humidity was in excess in the Punjab (I), in defect in east Uttar Pradesh, Vindhya Pradesh, Madhya Pradesh and south Hyderabad.

The mean cloud amount was above normal in the Bay Islands, Assam, West Bengal and Orissa and below normal in Uttar Pradesh, northwest India, the central parts of the country, Gujarat and Saurashtra and Kutch.

Data from Jammu and Kashmir are incomplete.

Table I contains the divisional and sub-divisional means of rainfall temperatures, humidity and cloud amount for the 13 chief political divisions and the 28 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 8·30 hours I. S. T. of the date noted in the succeeding column ; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 8.30 hours I. S. T. of the date given in the succeeding column.

POONA 5,
dated the 9th March, 1951.

C. RAMASWAMY,
for Director General of Observatories.

	Rainfall				Departure from normal of				
							0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"	"	"		°	°	mb.	%	
Assam (including Manipur and Tripura)	4·88	4·82	+0·06	+ 1	−0·2	+1·6	+0·9	+3	+1·4
West Bengal ...	4·23	4·75	−0·52	− 11	−1·1	+0·2	−0·2	+3	+1·7
Orissa ...	3·97	6·23	−2·26	− 36	−0·4	−0·5	−1·3	−1	+1·3
Bihar ...	0·31	2·50	−2·19	− 88	+0·9	−0·7	−1·0	−3	+0·2
Uttar Pradesh...	0·06	1·34	−1·28	− 96	+0·7	−1·8	−1·6	−5	−0·6
Punjab(I)(in- ... cluding PEPSU and Delhi)	0	0·58	−0·58	−100	−0·8	−2·5	+0·5	+7	−0·5
Rajasthan ...	0	0·34	−0·34	−100	−0·6	−1·9	−0·4	0	−0·8
Sub-Division									
Bay Islands ...	8·84	12·51	−3·67	− 29	+0·8	+0·7	−0·1	0	+1·8
Assam (including Manipur and Tripura)	4·88	4·82	+0·06	+ 1	−0·2	+1·6	+0·9	+3	+1·4
West Bengal ..	4·23	4·75	−0·52	− 11	−1·1	+0·2	−0·2	+3	+1·7
Orissa ...	3·97	6·23	−2·26	− 36	−0·4	−0·5	−1·3	−1	+1·3
Chota Nagpur ...	0·69	2·66	−1·97	− 74	−0·3	−1·0	−1·1	−3	+0·2
Bihar ...	0·12	2·42	−2·30	− 95	+1·9	−0·4	−0·9	−3	+0·2
Uttar Pradesh, East ...	0·10	1·79	−1·69	− 94	+1·8	−1·7	−2·8	−9	−0·6
Uttar Pradesh, West ...	0·01	0·89	−0·88	− 99	−0·4	−1·9	−0·3	0	−0·6
Punjab (I) (including PEPSU and Delhi)	0	0·58	−0·58	−100	−0·8	−2·5	+0·5	+7	−0·5
Jammu and Kashmir	...	...	Data	incom	plete	...	...	...	...
Rajasthan, West	0	0·16	−0·16	−100	0	−0·3	0	−1	−0·5
Rajasthan, East (including Ajmer)	0	0·53	−0·53	−100	−1·1	−3·1	−0·8	+1	−1·1
Madhya Bharat	0·06	1·13	−1·07	− 95	+0·7	−2·3	−2·3	−5	−0·8
Vindhya Pradesh	0·63	1·84	−1·21	− 66	+1·6	−3·6	−2·8	−9	−1·2

	Rainfall				Departure from normal of				
							0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division—Contd.	"	"	"		°	°	mb.	%	
8 Madhya Bharat and Vindhya Pradesh	0·31	1·44	−1·13	− 78	+1·0	−2·9	−2·5	−7	−1·0
9 Madhya Pradesh	0·45	2·29	−1·84	− 80	+0·8	−1·8	−2·7	−6	−0·5
10 Bombay (including Saurashtra & Kutch)	1·93	2·66	−0·73	− 27	−0·2	−1·6	−1·2	−1	−0·5
11 Hyderabad ...	2·04	2·36	−0·32	− 14	−0·3	−0·9	−2·4	−6	−0·3
12 Madras (including Travancore-Cochin)	7·45	7·91	−0·46	− 6	−·6	−0·6	−0·9	−1	+0·4
13 Mysore ...	5·13	6·08	−0·95	− 16	−1·5	−1·2	−1·4	0	−0·1
Mean of India ...	2·12	3·09	−0·97	− 31	0	−1·3	−1·3	−2	−0·2
Sub-Division—Contd.									
15 Madhya Pradesh, East	0·50	3·20	−2·70	− 84	+0·7	−2·2	−3·3	−7	−0·6
16 Madhya Pradesh, West	0·43	1·73	−1·30	− 75	+0·9	−1·6	−2·4	−6	−0·4
17 Gujarat ...	0	1·25	−1·25	−100	+0·5	−1·5	−1·1	−2	−1·1
18 Saurashtra and Kutch ...	0	0·50	−0·50	−100	−0·1	−0·9	−0·4	0	−0·9
19 Konkan ...	2·35	5·32	−2·97	− 56	+0·1	−1·0	−1·2	−2	−0·5
20 Deccan (Desh)	3·70	3·46	+0·24	+ 7	−0·8	−2·3	−1·7	−2	+0·1
21 Hyderabad, North ...	1·63	2·02	−0·39	− 19	−0·4	−0·9	−2·3	−5	−0·5
22 Hyderabad, South ...	2·46	2·70	−0·24	− 9	−0·2	−0·9	−2·5	−7	−0·3
23 Coastal Andhradesa	9·71	7·89	+1·82	+ 23	+0·1	−0·3	−1·1	−2	0
24 Rayalaseema	4·99	4·04	+0·95	+ 24	−2·1	−1·6	−0·3	+1	+0·4
25 Tamilnad	6·15	8·39	−2·24	− 27	−0·7	−0·4	−1·0	−1	+0·6
26 Malabar and South Kanara	8·69	9·21	−0·52	− 6	0	−1·1	−1·3	−2	−0·1
27 Mysore ...	5·13	6·08	−0·95	− 16	−1·5	−1·2	−1·4	0	−0·1
28 Travancore-Cochin	10·92	12·05	−1·13	− 9	−0·1	−0·5	−0·2	+1	+0·7

STATION	Height of bar, cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Bay Islands																						
Port Blair ...	259	1001·5	−0·7	998·8	84·7	+0·8	87	9,30	74·5	+0·7	72	26	81·7	77·9	77·3	75·6	31·0	−0·1	29·2	81	0	90
Assam																						
Dibrugarh ...	348	999·2	−2·0	995·4	83·7	−0·6	92	4 days	70·7	+1·2	67	16.21,23	76·1	77·0	73·2	74·1	26·6	+0·8	27·4	87	+5	87
Sibsagar ...	317	1000·6	−1·4	996·7	84·6	+0·3	91	4.5,9	72·7	+2·1	67	21	77·9	79·2	75·0	76·0	28·3	+0·8	29·2	87	−1	87
Tezpur ...	258	1002·7	−1·6	998·3	85·9	−0·4	94	9	72·5	+1·3	68	17,21,22	76·6	80·4	74·1	75·8	27·6	+1·2	28·4	88	+6	81
Gauhati ...	182	1004·9	−1·3	1000·4	86·0	−1·0	94	1,5	72·1	+1·1	68	21	78·0	80·5	74·5	74·9	27·6	+0·7	27·1	85	+2	77
Dhubri ...	115	1007·3	−1·1	1003·6	83·8	−0·5	89	5 days	73·9	+1·1	69	21	78·9	79·3	75·4	75·7	28·5	+1·2	28·7	85	+3	84
Silchar ...	96	1007·4	−1·8	1003·4	87·7	...	93	4	74·6	+2·4	71	16	78·4	83·1	75·7	78·1	29·1	+0·7	30·6	88	+6	79
Tura ...	1215	969·5	...	966·3	83·4	...	89	4	69·1	...	65	16	76·0	76·3	72·9	73·3	25·0	...	26·7	81	...	86
West Bengal																						
Dum Dum ...	33	1008·8	...	1005·7	87·0	...	94	16	74·5	...	69	21	80·5	81·0	75·4	75·6	27·8	...	27·8	79	...	77
Calcutta ...	21	1009·2	−1·6	1006·2	87·6	−1·6	94	16	74·7	+0·9	69	21	80·9	81·0	76·3	75·9	28·9	+0·3	28·3	81	−1	79
Saugor Island ...	10	1009·2	−1·7	1006·3	84·8	−2·0	89	5 days	76·2	−0·1	70	23	80·8	80·2	76·5	76·4	29·2	−0·5	29·3	82	+4	84
Sandheads ...	32	1008·3	−2·2	1005·8	...	...	...	...	...	...	...	...	82·5	82·5	76·7	76·7	28·7	−1·2	28·7	76	+4	77
Midnapore ...	149	1004·9	−1·4	1001·7	87·1	−2·1	93	14.16	73·3	−1·1	63	9	78·8	81·8	74·2	75·9	26·8	0	27·9	79	+4	77
Contai ...	36	1008·3	...	1005·1	85·9	...	92	1,16	74·1	...	68	22,23	79·6	81·5	75·6	75·9	28·4	...	28·0	82	...	76
Burdwan ...	105	1006·1	−1·9	1002·8	87·4	−1·7	94	16	73·8	−0·4	68	21	79·0	82·8	75·1	76·4	28·0	+0·6	28·2	83	+6	74
Krishnagar ...	48	1008·6	−1·4	1005·2	88·4	−1·1	95	15.16,17	73·1	+0·1	68	21	79·7	81·6	75·9	76·8	28·8	+0·7	29·3	84	+11	80
Asansol ...	414	995·9	−1·5	992·5	88·7	−0·3	94	16	71·2	+0·4	66	8	78·5	82·6	72·9	73·7	25·2	−0·6	24·3	75	−1	65
Berhampore ...	62	1008·3	−1·3	1004·7	88·6	+0·2	95	16	74·1	+0·2	68	21	80·4	82·9	75·4	76·4	27·8	−0·3	28·1	79	+1	74
Malda ...	103	1006·7	−1·5	1003·5	87·4	−0·7	92	16	73·5	+1·2	68	21	81·0	81·9	75·0	75·6	26·9	−0·9	27·4	75	0	74
Cooch Behar ...	145	1005·2	...	1002·3	87·0	...	93	1.4,11	71·9	...	66	21	78·6	81·7	73·5	76·3	25·9	...	28·5	78	...	77
Jalpaiguri ...	271	1001·4	−1·4	997·7	...	...	..	...	71·0	+0·7	66	16,17	75·8	82·6	72·1	75·9	25·2	−1·0	27·5	83	0	73
Orissa																						
Balasore ...	65	1007·5	−1·6	1004·7	87·5	−0·9	93	5	72·7	−0·6	67	24	79·3	81·3	73·6	75·7	25·7	−1·9	27·8	76	−2	77
Chandbali ...	20	1008·7	−1·9	1006·1	87·7	−0·2	95	14	74·3	−0·3	69	19.21,22	79·8	82·8	75·6	77·4	28·3	−0·6	29·7	82	+1	78
Puri ...	20	1009·2	−1·2	1006·3	88·2	−0·4	95	7	76·3	−0·7	69	19	80·8	82·9	75·6	76·2	27·9	−1·2	27·9	78	+1	74
Cuttack ...	87	1006·6	−1·9	1003·4	89·0	−0·7	94	16	74·6	+0·2	69	19	78·8	84·3	73·3	75·0	25·5	−2·0	25·4	76	−2	64
Gopalpur ...	56	1008·0	−1·2	1005·1	88·8	+0·6	96	8	74·3	−0·3	70	19,23	80·3	83·3	74·8	76·9	27·0	−1·0	28·7	77	−1	73
Angul ...	455	994·9	−0·7	991·6	87·4	−1·1	92	14	71·6	0	66	24	76·5	83·6	71·9	73·6	24·7	−1·2	23·7	79	+2	62
Sambalpur ...	486	993·5	−1·5	990·5	88·6	−0·2	92	7,17	69·8	−1·7	63	23,25	78·2	84·2	72·0	73·4	24·0	−1·5	23·2	73	−3	59
Jharsuguda ...	726	985·5	...	982·2	...	...	...	...	...	...	...	...	78·6	80·4	71·6	72·6	23·2	...	23·9	70	...	68
Titilagarh ...	691	986·7	...	983·5	89·0	...	94	14	70·3	...	63	22,24,25	76·7	83·5	70·7	72·6	22·9	...	22·5	73	...	58
Chota Nagpur																						
Purulia ...	835	982·2	...	978·9	88·2	...	93	1	70·5	...	66	21,22	78·0	81·8	71·9	74·4	24·1	...	25·6	74	...	70
Jamshedpur ...	423	995·9	−1·2	992·5	88·7	−1·0	94	16	71·1	0	65	8	77·6	83·2	71·8	73·3	24·0	−0·6	23·5	74	−1	62
Chaibasa ...	742	984·8	−1·1	981·5	87·7	−0·5	92	16	69·8	−0·3	64	18,21,25	76·4	82·2	71·0	72·6	23·5	−1·0	23·1	76	0	62
Ranchi ...	2,150	932·1	−0·7	935·3	83·4	+0·3	87	7,13	64·3	−1·9	60	27	75·6	77·2	67·2	67·6	19·3	−0·8	19·2	65	−1	60
Hazaribagh ...	2,003	942·7	−1·4	939·9	83·0	−0·6	86	11,16	64·1	−2·4	59	9	75·1	75·7	67·0	66·7	19·4	−0·1	18·7	65	0	62
Daltonganj ...	725	985·9	−1·0	982·2	89·0	−0·1	92	12,16,17	64·8	−1·7	59	22,23	76·4	82·8	68·4	70·2	20·1	−1·9	19·5	65	−11	51
Dhanbad ...	839	981·2	...	...	88·0	...	93	1,13	69·0	...	64	7	78·1	...	71·3	...	23·1	...	...	71	...	...
Bihar																						
Purnea ...	124	1006·3	−1·3	1002·5	89·4	+1·5	94	1	71·4	+0·6	65	31	80·3	82·1	74·5	76·4	26·6	−0·2	28·4	75	−5	76

Cloud amount (Oktas)			Rainfall, inches				No of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from:—																	STATION
											0830 hrs. I. S. T.									1730 hrs. I. S. T.								
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
25		26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bay Islands
)	+1·8	6·5	8·84	-3·67	2·21	7	15	-1·7	5·3	-2·3	1	3	4	4	2	5	7	1	4	0	2	1	3	1	4	6	2	12	Port Blair
																													Assam
7	+1·5	4·9	9·10	+3·11	2·81	14	11	+2·4	1·0	+0·3	5	3	6	1	1	0	4	6	5	1	2	1	0	1	1	0	1	24	Dibrugarh
)	+1·1	5·5	2·80	-2·37	0·96	26	9	+1·1	1·9	+0·5	6	12	2	1	3	2	1	1	3	8	5	0	2	3	0	1	2	10	Sibsagar
1	+1·4	3·5	4·64	+0·54	2·75	12	7	+0·7	1·1	-0·4	2	5	16	2	2	2	0	0	2	0	1	5	0	2	0	0	0	23	Tezpur
9	+0·7	4·4	5·33	+2·55	2·13	11	6	+1·8	1·9	+0·7	9	7	5	2	1	2	20	0	3	1	6	2	2	1	2	1	1	15	Gauhati
4	+1·4	3·3	5·60	+0·70	1·66	11	6	+1·0	0·9	-2·3	1	7	3	0	0	1	1	0	18	0	2	2	0	2	1	0	0	24	Dhubri
3	+2·3	4·9	3·37	-3·98	1·02	15	9	+1·1	1·0	0	1	2	2	2	1	1	1	0	21	1	1	0	1	0	0	1	1	26	Silchar
1	...	5·3	15·40	...	4·72	11	11	...	2·7	...	3	0	2	2	2	5	0	1	16	0	6	1	7	3	3	5	0	6	Tura
																													West Bengal
)	...	5·7	6·57	...	1·72	29	9	...	2·7	...	6	5	4	2	0	1	2	6	5	4	3	0	2	2	2	0	6	12	Dum Dum
)	+3·0	5·8	6·38	+1·90	1·97	1	10	+3·8	1·8	-0·3	2	6	1	0	0	2	4	5	11	2	2	2	1	0	2	2	4	16	Calcutta
)	+0·9	5·3	6·11	-1·96	0·91	2	11	+6·5	6·7	+0·9	12	5	2	1	1	2	3	4	1	8	3	4	2	2	2	2	5	3	Saugor Island
5	+2·0	5·9	8·21	+3·58	3·56	20	8	+2·3	...	...	6	5	3	1	0	2	3	7	4	6	3	5	1	3	1	3	3	6	Sandheads
4	+1·8	4·9	4·16	+0·36	1·38	28	7	+1·4	2·5	+1·1	9	6	3	0	0	1	2	1	9	2	9	3	1	1	0	0	0	15	Midnapore
4	...	5·7	6·05	...	1·70	29	9	...	1·9	...	11	4	2	1	0	2	2	9	0	12	4	2	3	3	1	0	4	2	Contai
4	+1·4	4·9	4·69	+1·39	1·49	3	6	+1·6	2·5	+1·2	6	5	4	0	0	2	5	5	4	4	1	4	1	1	2	1	1	16	Burdwan
6	+2·7	5·7	5·53	+1·29	2·37	21	7	+2·0	1·6	-0·2	3	2	4	0	4	1	8	3	6	3	0	2	1	1	1	2	0	21	Krishnagar
2	+1·3	4·5	1·68	-2·66	0·72	12	3	-2·5	3·1	+0·1	2	3	0	2	0	2	6	13	3	1	0	3	2	0	1	0	7	17	Asansol
0	+2·1	5·6	1·79	-1·85	0·28	30	9	+4·5	1·0	-0·4	3	1	6	0	2	1	1	1	16	1	1	2	0	4	1	0	0	22	Berhampore
8	+2·0	3·9	0·63	-3·72	0·40	29	2	-2·3	2·9	+0·1	6	6	6	2	1	3	2	2	3	5	1	2	4	1	3	2	3	10	Malda
1	...	3·5	10·41	+3·10	3·76	21	5	-1·2	2·8	...	2	12	10	1	2	2	0	0	2	1	4	3	1	3	2	0	0	17	Cooch Behar
0	+0·7	2·3	4·85	-0·71	1·55	22	5	-0·5	2·9	+1·7	8	9	6	0	0	0	0	2	6	1	3	7	3	5	2	1	0	9	Jalpaiguri
																													Orissa
7	+1·6	5·7	4·00	-2·43	1·56	11	5	-1·4	3·0	+1·2	19	5	0	0	0	0	1	6	0	1	4	4	0	1	0	0	0	21	Balasore
7	+2·3	5·9	6·75	-0·88	2·24	31	8	-0·3	3·8	+0·1	7	2	0	1	0	4	3	14	0	10	9	3	2	1	1	0	2	3	Chandbali
6	+1·6	5·4	5·28	-1·93	1·80	19	8	+0·7	6·9	+0·5	12	8	1	0	1	2	1	6	0	8	5	3	5	4	3	0	2	1	Puri
8	+0·6	5·0	3·12	-3·22	0·62	31	6	-0·3	2·9	+1·6	0	6	0	0	0	0	1	2	22	0	5	1	0	0	0	0	0	25	Cuttack
3	+1·5	5·5	5·65 (F)	-2·95	3·31	19	8	+1·1	5·7	0	18	0	0	1	0	0	1	10	1	7	5	6	7	3	2	0	1	0	Gopalpur
6	+1·1	5·6	2·13	...	...	...	...	...	3·3	+1·2	1	1	0	0	1	1	11	15	1	6	1	2	4	3	1	4	3	7	Angul
2	+0·5	3·4	0·04	-2·10	0·03	12	0	-3·5	2·3	0	13	10	2	0	3	0	1	1	1	5	11	5	2	2	1	3	2	0	Sambalpur
3	...	4·1	0·31	...	0·17	14	2	...	...	...	14	5	1	0	0	0	0	0	11	1	5	1	0	1	0	0	0	23	Jharsuguda
9	...	3·9	0·93	...	0·48	14	2	...	1·4	...	6	5	2	3	2	1	0	3	9	2	3	2	1	0	0	1	1	21	Titilagarh
																													Chota Nagpur
7	...	4·5	0·18	...	0·26	13	2	...	2·5	...	10	2	0	2	0	1	8	8	0	2	6	3	4	1	1	3	3	8	Purulia
5	+0·4	4·8	0·78	-1·88	0·46	29	2	-2·2	2·8	+0·7	1	0	2	1	0	1	10	6	10	2	2	4	3	1	0	2	5	12	Jamshedpur
0	+1·2	5·6	0·43	-2·50	0·16	20	2	-2·4	1·3	+0·1	2	3	0	0	1	4	0	0	21	0	3	0	0	1	4	0	1	22	Chaibasa
9	-0·9	2·6	1·11	-2·02	0·56	13	3	-1·8	1·5	-1·4	2	1	0	0	0	1	1	1	25	5	0	0	0	1	0	0	1	24	Ranchi
8	+0·3	3·0	1·05	-2·05	1·05	13	1	-3·6	4·4	+0·1	4	7	1	0	2	1	3	8	5	9	1	0	1	2	0	0	14	4	Hazaribagh
9	+0·1	2·7	0·42	-1·51	0·42	13	1	-2·2	1·6	-0·4	2	1	3	5	0	0	7	0	13	1	2	4	2	1	2	3	5	11	Daltonganj
	...	...	1·02	...	0·90	13	2	...	2·9	...	2	6	2	0	0	5	1	2	13	...	...	...	...	...	...	...	...	...	Dhanbad
																													Bihar
5	+0·3	3·3	0·22	-3·00	0·20	22	1	-2·4	1·6	+0·3	0	6	8	2	1	5	3	1	5	0	2	0	0	0	2	3	0	24	Purnea

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
Bihar (Contd.)																						
Darbhanga ...	161	1005·1	−1·1	1001·3	90·1	+1·9	94	1,2,4	70·6	−1·0	67	8 days	79·7	84·8	73·9	76·5	26·0	0	27·4	76	+5	67
Motihari ...	218	1003·0	−1·2	999·4	90·1	+2·0	95	1,2	66·4	−2·9	61	7,31	81·3	82·0	73·2	74·5	24·4	−1·7	25·8	66	−11	69
Patna ...	173	1004·5	−1·2	1000·9	91·3	+2·7	95	2	72·4	−0·4	69	23.26,31	81·8	85·4	72·4	73·5	22·6	−2·5	22·9	62	−7	53
Dehri ...	352	998·3	...	994·7	90·4	...	95	18	68·5	...	64	15	78·0	83·7	70·4	72·1	21·9	...	21·6	67	...	55
Gaya ...	365	997·8	−1·1	994·2	90·1	+1·5	94	16	69·2	−0·8	65	4 days	78·5	83·8	70·3	71·5	21·6	−1·2	20·8	63	−5	53
Dumka ...	489	993·1	−1·9	990·1	87·9	−0·2	94	13	...	...	...	...	79·5	83·7	72·1	74·0	23·5	−1·9	25·0	69	−3	62
Sabour ...	122	1006·0	−1·6	1002·4	89·8	+1·7	93	5 days	70·6	−0·4	65	7.31	80·5	82·6	74·1	74·8	25·9	−0·6	25·9	73	−3	68
U. P., East																						
Gonda ...	360	998·4	...	995·0	91·9	+1·1	96	6	64·9	−2·6	59	22	76·0	83·1	68·5	70·8	20·4	−2·8	20·1	66	−10	56
Gorakhpur ...	254	1001·5	−1·3	998·2	91·8	+2·7	94	1,2	68·9	−0·5	63	20,21	78·6	86·7	70·5	71·8	21·4	−3·2	19·9	64	−11	50
Azamgarh ...	255	1001·4	...	997·7	93·2	...	96	2,16	65·9	...	60	22	76·2	86·3	70·1	74·2	22·3	...	23·2	73	...	54
Banaras ...	250	1001·9	−1·0	998·3	91·8	+1·3	95	2,17	65·6	−2·4	59	23	77·2	87·1	68·7	71·1	20·1	−3·0	18·8	60	−9	42
Allahabad (Bamrauli) ...	322	999·6	−0·8	996·1	93·0	+1·6	95	16,17	65·5	−1·6	60	22	77·7	86·4	68·1	70·1	19·2	−2·1	17·8	59	−8	41
Fatehpur ...	375	997·9	...	994·3	92·5	0	95	16	64·7	−1·8	58	28	77·2	86·4	67·9	68·4	18·3	−3·2	15·6	57	−11	42
Banda ...	398	997·0	...	993·8	94·3	...	98	1,16	65·3	...	58	28	76·0	87·4	66·5	69 5	17·3	...	16·1	58	...	36
Kanpur ...	414	996·5	−0·6	993·3	93·0	+1·8	97	16	64·9	−1·1	60	22.30,31	77·6	86·3	66·3	68·6	16·9	−3·9	15·9	54	−14	37
Lucknow ...	371	998·1	−0·5	994·8	92·6	+1·2	95	5 days	65·2	−1·3	59	23,30	74·3	83·8	67·1	71·7	19·4	−2·4	21·4	66	−3	50
Bahraich ...	407	996·9	−0·3	993·7	92·0	+1·9	95	1	66·1	−2·3	61	21	78·4	84·4	69·8	71·6	21·2	−2·0	20·8	63	−10	48
U. P., West																						
Jhansi ...	823	982·8	−0·8	979·6	91·6	−1·5	95	16	64·4	−2·3	59	31	75·3	88·6	64·4	67·6	15·7	−2·0	13·7	53	−2	30
Agra ...	553	992·1	−0·2	988·8	91·8	−1·0	95	15,16	65·2	+0·1	63	5 days	72·5	89·2	64·1	68·7	16·6	+1·5	14·7	61	+9	31
Mainpuri ...	516	993·1	−0·2	988·6	93·2	0	96	15,16	62·6	−2·4	57	22,29.30	79·3	87·4	66·5	71·4	18·2	−0·4	18·7	64	+2	43
Aligarh ...	615	989·8	..	987·0	92·5	−0·6	96	16	62·8	−3·1	57	22	73·2	86·8	64·9	68·7	17·3	+1·5	15·7	61	+10	36
Bareilly ...	568	991·0	−0·7	987·8	91·3	+1·6	94	13	64·3	−1·5	60	29.30.31	75·1	84·5	66·7	69·1	18·9	−2·1	17·9	62	−11	43
Meerut ...	728	985·8	−0·2	...	90·5	0	93	12,13,15	61·2	−1·4	55	28,29,30	70·6	...	64·1	...	17·5	+0·6	...	69	+2	...
Roorkee ...	899	979·9	−0·7	976·7	88·4	+0·2	92	12,13	58·9	−2·5	53	29,31	69·3	82·9	63·2	68·6	17·0	−0·9	17·5	70	−2	45
Dehra Dun ...	2,239	935·4	−0·4	933·1	83·6	+0·7	88	11	58·2	−2·1	52	28	69·2	79·1	60·4	67·1	14·4	−0·8	17·7	59	−9	52
Punjab (I)																						
New Delhi ...	710	986·4	−0·3	983·4	91·1	−1·4	94	19	63·2	−1·1	58	21	73·4	85·0	63·0	67·8	14·9	−0·7	15·7	53	−2	38
Hissar ...	725	986·4	0	983·6	93·9	−0·7	99	19	59·8	−3·4	54	30	66·2	88·3	60·5	70·4	15·5	+1·3	17·1	70	+16	39
Karnal ...	818	982·2	...	979·9	89·2	...	92	12	61·3	...	54	26,29	69·1	84·5	63·2	69·1	17·0	...	17·6	70	...	43
Ambala ...	892	979·4	−1·1	976·6	91·5	−0·3	94	11	59·5	−2·6	54	23	66·9	85·8	61·3	68·6	16·2	+0·1	15·9	71	+11	38
Patiala ...	822	982·3	...	979·5	90·6	...	94	12	59·4	...	54	29	69·3	83·4	62·8	67·7	16·4	...	16·1	68	...	43
Ludhiana ...	810	983·1	−0·2	980·6	91·4	−0·9	95	12	60·5	−2·7	56	25·30,31	71·0	88·1	63·7	70·0	16·6	+1·5	16·9	66	+5	37
Ferozepore ...	657	988·4	...	986·1	89·2	...	93	10,14	61·1	...	57	30.31	71·6	84·9	65·8	72·9	19·0	...	22·3	73	...	54
Amritsar ...	769	984·3	...	982·2	87·2	...	91	10	61·5	...	55	31	70·2	83·1	66·5	72·2	20·5	...	21·5	81	...	57
Jammu & Kashmir																						
Srinagar ...	5,205	845·0	+0·1	842·2	65·8	−3·0	74	10	42·5	+1·9	37	31	47·9	60·8	45·9	52·5	9·9	+0·3	10·5	87	+1	59
Gulmarg ...	8,709	Closed during winter months.																				
Dras (R) ...	10,059																					
Leh ...	11,529	669·2	−0·2	666·5	54·5	−3·8	61	5,11	27·5	−3·1	23	24,25	38·1	47·7	28·7	34·9	2·4	−1·6	2·9	32	−14	27
Skardu (R) ...	7,505																					
Gilgit (R) ...	4,890																					
Misgar (R) ...	10,190																					

(R) Register not received.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I. S. T.									1730 hrs. I. S. T.								
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	43	43	44	45	46	47	48	49	50	51	52	53
																													Bihar *(Contd.)*
1·6	−0·3	1·3	0·02	−3·38	0·02	26	0	−2·5	0·5	−0·8	0	6	5	0	1	2	5	2	10	0	0	2	0	0	0	2	0	27	Darbhanga
0·9	−0·6	0·5	0	−2·31	0	...	0	−2·5	1·2	−0·5	0	1	7	0	0	0	2	0	21	0	0	0	1	0	0	0	0	30	Motihari
1·7	−0·2	2·2	0	−2·30	0	...	0	−2·9	2·9	+0·9	1	4	1	3	3	8	5	2	4	1	8	1	0	1	9	2	3	6	Patna
2·3	...	2·2	0	−1·95	0	...	0	−2·6	1·9	...	1	0	2	1	8	11	0	4	4	2	1	1	0	0	2	0	9	16	Dehri
2·0	+0·1	2·5	0·07	−1·85	0·07	12	0	−2·9	3·2	+0·2	0	0	1	1	11	6	2	0	10	4	1	2	0	2	1	6	3	12	Gaya
1·8	−0·3	3·0 (a)	3·06	−0·75	1·93	13	4	−0·6	...	...	6	0	4	3	1	0	12	5	0	6	0	6	5	3	2	3	5	1	Dumka
3·6	+1·0	4·0	0·22	−2·92	0·16	10	1	−1·9	2·7	+0·2	2	5	2	2	3	6	5	3	3	3	3	1	3	0	2	3	4	12	Sabour
																													U. P., East
0·4	−1·0	1·1	0·32	−1·47	0·32	13	1	−0·7	2·0	0	2	1	5	1	0	0	6	3	13	2	0	0	0	0	1	0	1	27	Gonda
1·2	0	0·9	0·14	−2·83	0·14	25	1	−1·3	1·8	+0·8	2	4	6	2	1	2	6	1	7	0	0	3	1	0	1	10	2	14	Gorakhpur
0·9	...	0·5	0	...	0	...	0	...	...	...	0	0	2	0	1	6	1	0	21	0	0	1	0	0	0	3	0	27	Azamgarh
0·6	−1·1	0·9	0·02	−2·16	0·02	25	0	−2·2	4·5	+2·3	0	1	1	1	1	16	8	0	3	4	1	1	0	1	1	14	8	1	Banaras
0·8	−0·9	0·7	0	−2·34	0	...	0	−2·5	2·2	−0·1	0	3	2	0	3	6	10	4	3	4	1	1	0	1	0	4	10	10	Allahabad (Bamrauli)
0·7	−0·6	0·8	0·08	−0·81	0·08	12	0	−1·4	2·1	+0·5	0	0	2	0	0	3	4	2	20	0	0	2	0	0	0	0	0	29	Fatehpur
0·4	...	0·5	0	...	0	...	0	...	1·4	...	0	0	1	1	2	3	9	1	14	2	0	1	0	0	1	6	1	20	Banda
0·5	−0·2	0·2	0	−1·30	0	...	0	−1·5	4·2	+0·7	2	2	4	0	0	4	10	2	7	7	1	2	1	0	1	4	9	6	Kanpur
0·4	−0·6	0·6	0·14	−1·14	0·14	12	1	−0·7	1·3	+0·2	3	1	2	0	0	0	7	2	16	2	0	0	0	1	0	4	2	22	Lucknow
0·4	−0·6	0·7	0·10	−1·48	0·10	12	1	−0·7	3·4	+1·0	2	2	2	1	0	1	4	3	16	0	0	0	0	0	2	2	2	25	Bahraich
																													U. P., West
0·3	−0·7	0·5	0	−0·99	0	...	0	−1·1	2·7	+0·3	0	0	0	0	0	2	8	2	19	3	1	0	0	0	1	4	0	23	Jhansi
0	−0·8	0·1	0	−0·71	0	...	0	−0·8	1·2 (a)	−1·2	0	0	0	0	0	0	0	1	30	0	0	0	0	0	0	0	7	24	Agra
0·3	−0·7	0·4	0	−0·95	0	...	0	−1·0	1·8	+0·7	1	1	1	2	1	7	9	1	8	0	1	0	0	0	6	7	8	9	Mainpuri
0·3	−0·3	0·5	0·11	−0·20	0·11	12	1	+0·7	3·1	0	0	0	1	0	0	0	3	0	27	1	0	0	0	0	0	4	5	21	Aligarh
0·2	−0·7	0·2	0	−1·27	0	...	0	−0·9	1·5	+0·5	1	0	5	2	1	0	4	3	15	5	0	0	0	0	0	7	3	16	Bareilly
0·2	−0·3	...	0	−0·81	0	...	0	−0·9	2·6	...	1	1	1	2	1	1	5	6	13	...	...	...	...	...	...	...	...	...	Meerut
0·2	−0·4	0·7	0	−0·84	0	...	0	−0·9	1·3	+0·1	0	0	0	6	0	0	0	1	24	0	0	0	1	0	0	0	6	24	Roorkee
0·1	−0·9	0·3	0	−1·26	0	...	0	−1·6	2·1	+0·2	1	2	0	0	0	1	9	0	18	1	0	0	0	0	1	2	0	27	Dehra Dun
																													Punjab (I)
0·4	−0·3	0·3	0	−0·40	0	...	0	−0·6	3·3	...	1	0	2	2	0	3	15	3	5	7	4	0	0	1	0	1	11	7	New Delhi
0·1	−0·5	0·1	0	−0·61	0	...	0	−0·6	3·1	−0·1	0	2	3	1	4	10	2	0	9	6	2	1	0	0	0	4	13	5	Hissar
0·1	...	0·1	0	...	0	...	0	...	2·3	...	7	2	1	2	0	1	5	9	4	1	0	0	0	0	0	9	13	8	Karnal
0	−0·7	0	0	−0·87	0	...	0	−0·9	3·0	+1·1	0	0	3	1	0	0	0	3	24	1	0	0	0	0	0	7	5	18	Ambala
0·3	...	0·3	0	...	0	...	0	...	3·3	...	6	0	4	11	0	0	3	3	4	13	0	0	0	0	0	4	8	6	Patiala
0	−0·6	0	0	−0·43	0	...	0	−0·7	1·0	0	0	3	2	0	3	1	3	1	18	1	2	0	0	0	0	1	5	23	Ludhiana
0	...	0	0	...	0	...	0	...	0·6	...	1	1	0	2	2	2	0	0	23	5	0	0	0	0	2	2	1	21	Ferozepore
0·1	...	0·2	0	...	0	...	0	...	4·0	...	2	4	8	4	3	1	1	1	7	2	1	1	0	0	2	5	17	3	Amritsar
																													Jammu & Kashmir
1·8	−0·1	1·5	0·45	−0·72	0·14	17	2	−0·8	1·5	−0·5	3	0	0	8	3	2	0	2	13	2	0	0	2	1	0	2	5	19	Srinagar
																													Gulmarg
																													Dras (R)
1·6	−0·6	2·1	0·02	−0·08	0·02	1	0	−0·3	4·1	+2·2	0	0	0	1	1	2	0	0	27	1	3	0	0	0	10	12	1	4	Leh
																													Skardu (R)
																													Gilgit (R)
																													Misgar (R)

(a) Mean of 30 days

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Rajasthan, West																						
Sri Ganganagar ...	580	990·8	...	988·2	93·1	−2·0	97	5	60·5	+0·8	54	31	71·5	87·1	63·4	68·7	16·4	+4·1	15·5	62	+12	36
Bikaner ...	734	985·3	−1·6	982·5	96·3	−0·5	100	4	62·8	−3·5	55	30,31	72·5	93·9	59·1	64·4	11·1	−1·7	7·4	41	−6	15
Jaisalmer ...	793	982·9	...	980·0	97·6	...	100	12,13	68·8	...	61	30,31	77·3	94·9	67·4	77·6	18·1	...	24·3	58	...	43
Jodhpur ...	736	985·8	+0·8	983·2	96·5	+1·0	99	14	66·3	+0·9	61	30	74·5	93·6	60·7	66·0	11·9	−2·4	9·4	41	−10	17
Phalodi ...	783	983·7	...	981·0	96·5	...	100	15	68·8	...	64	29,31	76·1	94·3	62·9	72·2	13·6	...	16·8	45	...	31
Barmer ...	638	989·0	−0·3	985·9	98·7	+1·6	102	14	70·7	+0·4	64	31	78·2	95·0	66·7	72·5	16·8	−0·1	17·1	51	−2	33
Rajasthan, East																						
Sikar ...	1419	962·9	...	960·3	92·3	...	95	18,19	59·3	...	53	26	74·9	87·6	64·1	69·1	15·8	...	15·9	53	...	37
Jaipur* ...	1431	962·8	−0·7	959·9	92·7	−1·4	95	5,17,18	62·1	−2·2	57	26,31	77·9	87·9	63·2	66·5	13·2	−0·8	12·5	40	−6	28
Ajmer ...	1593	957·5	−0·5	954·7	90·9	−0·6	93	5 days	61·2	−3·4	55	30	73·1	86·3	62·1	64·0	14·4	−0·4	10·6	53	+6	27
Kotah ...	843	982·3	−0·6	979·3	93·6	−1·0	96	16	67·7	−2·6	63	30,31	75·5	89·7	64·2	67·8	15·4	−0·6	13·4	51	+2	28
Jhalawar ...	1053	975·0	−0·8	971·7	91·9	0	95	15,16,17	61·9	−2·2	56	27,28	70·6	88·6	63·2	67·1	16·6	−0·6	13·0	64	+3	28
Udaipur ...	1910	947·2	−0·5	944·6	89·3	−2·4	92	30	58·5	−5·2	53	31	71·7	84·7	61·7	63·9	14·2	−1·5	10·9	56	−1	29
Madhya Bharat																						
Gwalior ...	681	987·4	...	984·1	92·9	...	96	15,16	62·1	...	56	26	79·2	87·3	65·1	66·6	14·8	...	13·0	44	...	29
Guna ...	1571	957·6	−0·9	955·1	90·8	+1·2	94	16,17	58·9	−3·3	54	5 days	72·1	85·9	62·5	66·1	15·5	−1·7	13·8	58	−4	33
Neemuch ...	1626	956·8	−0·2	954·1	90·8	−0·2	94	18	63·2	−1·4	58	27	74·4	86·9	62·3	64·6	14·2	−1·8	11·7	49	−6	27
Ratlam ...	1596	957·4	...	954·5	90·6	...	93	4 days	63·9	...	58	28,30	75·9	87·1	65·2	70·6	16·8	...	18·8	54	...	44
Indore ...	1839	949·1	−0·3	946·1	88·9	+0·2	91	6 days	60·0	−2·3	54	28,29,31	74·6	85·0	62·8	64·4	14·7	−3·7	12·3	51	−4	30
Bhopal ...	1643	955·4	−0·8	952·5	90·1	+1·4	93	15	63·0	−2·2	56	30	76·3	85·1	64·2	66·7	15·5	−1·8	14·7	50	−8	33
Bairagarh ...	1714	953·9	+0·1	950·1	90·1	+2·2	93	15,16,18	62·3	−1·8	57	26,27,29	75·5	84·5	62·4	63·8	13·9	−4·7	11·6	47	−15	29
Madhosagar ...	757	984·9	...	981·8	93·7	...	97	16,19	66·5	...	62	28	76·0	88·0	64·6	66·3	15·6	...	12·3	51	...	27
Vindhya Pradesh																						
Nowgong ...	750	985·4	−0·5	982·1	92·1	+1·4	97	16	60·4	−4·4	55	4 days	73·5	87·2	64·1	68·7	16·2	−3·4	15·6	57	−12	35
Sutna ...	1041	975·1	−0·9	971·7	90·5	+2·1	95	16	62·6	−3·3	55	28	75·0	84·9	65·7	68·9	17·5	−2·8	16·9	59	−8	42
Umaria ...	1506	959·5	...	956·5	88·0	+1·2	93	16	59·9	−3·2	53	28	73·8	82·6	64·9	69·6	17·4	−2·3	19·4	61	−6	51
Madhya Pradesh East																						
Gondia ...	1026	976·0	...	972·9	89·0	...	92	5 days	66·0	...	60	24	75·0	84·7	68·2	70·7	20·0	...	19·3	69	...	48
Pendra ...	2040	941·9	−0·9	939·1	84·3	+1·2	87	2,17	63·2	−0·9	57	22	74·2	77·6	64·0	65·3	16·2	−3·1	16·4	57	−11	51
Champa ...	805	983·2	...	979·8	89·5	...	93	7,13	68·9	...	62	22	75·0	85·4	68·0	70·8	20·2	...	19·1	68	...	49
Raipur ...	979	977·2	−0·8	973·9	88·7	+0·2	93	7,8	68·2	−1·4	62	23,24	76·1	84·2	68·2	70·1	19·8	−3·1	18·7	65	−6	48
Kanker ...	1318	966·0	−0·4	962·8	87·3	+0·8	90	6 days	64·5 (a)	−2·7	55	24	73·9	82·9	67·8	69·9	20·5	−2·6	19·1	71	−8	50
Chanda ...	634	988·9	−1·0	985·1	90·7	+0·9	98	30	64·2	−4·0	57	21,27,28	74·9	85·9	66·9	71·2	18·9	−4·6	19·4	63	−10	46
Jagdalpur ...	1815	948·7	−0·8	945·8	85·5	+0·6	90	14	64·2	−1·9	53	24	71·9	80·1	67·3	68·8	21·0	−2·9	19·4	78	−1	56
Madhya Pradesh West																						
Buldhana ...	2133	938·7	...	935·9	87·3	...	89	6 days	68·1	...	63	25,27,28	75·5	84·6	64·3	67·3	16·0	...	15·8	53	...	40
Akola ...	925	979·3	−0·8	975·5	94·1	+1·5	97	3	65·6	−1·3	56	27	73·9	89·5	64·6	69·3	16·5	−2·4	15·3	58	−3	31
Amravati ...	1213	969·7	−0·6	966·0	91·6	+0·7	95	3,7	68·6	−0·1	61	29	76·9	88·8	64·9	67·5	15·6	−2·8	13·3	50	−8	39
Yeotmal ...	1481	960·6	...	957·5	90·0	...	93	3,6,7	66·8	...	61	21,23,29	78·3	85·1	66·6	67·9	17·0	...	15·5	53	...	39
Khandwa * ...	1044	975·3	−0·8	971·8	92·9	+0·4	95	5 days	62·7	−3·4	55	30	75·4	88·3	64·8	67·3	16·2	−2·3	13·3	54	−8	30
Hoshangabad ...	992	977·3	−1·2	973·8	91·9	+2·2	95	4 days	64·3	−2·4	57	20	73·6	87·2	65·7	74·5	18·0	−1·8	23·4	64	−4	54
Sagar ...	1808	949·5	−0·9	946·7	87·9	−0·3	92	16	65·9	−0·4	62	20,21	76·1	82·7	62·3	62·7	13·6	−2·6	11·4	44	−10	30
Jabalpur ...	1289	967·3	−0·3	963·8	89·6	+1·8	95	10	61·4	−2·1	54	29	72·4	84·2	65·2	68·9	18·0	−2·3	17·2	66	−5	44
Seoni ...	2027	942·5	−0·7	940·2	86·4	0	90	2,5	63·3	−0·9	55	28	74·9	80·9	63·7	64·0	15·7	−2·3	13·5	53	−8	38

* 1730 hrs. observations for 30 days

Cloud amount (Oktas)		Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																						STATION
										0830 hrs. I.S.T.											1730 hrs. I.S.T.											
Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		
																																Rajasthan, West
-0·2	0	0	-0·10	0	...	0	-0·3	2·2	-2·2	1	0	5	3	10	5	0	0	7	2	3	0	0	0	0	3	3	20		Sri Ganganagar
-0·6	0·1	0	-0·21	0	...	0	-0·4	2·6	-1·2	0	0	0	12	3	13	0	1	3	1	9	0	0	0	10	0	8	3		Bikaner
...	0·1	0	...	0	...	0	...	5·5	...	0	2	1	1	1	19	1	0	6	1	2	0	3	0	16	1	8	0		Jaisalmer
-0·7	0·7	0	-0·32	0	...	0	-0·5	2·6	-2·2	0	6	4	1	1	5	2	0	12	3	2	4	6	3	6	4	1	2		Jodhpur
...	0·2	0	-0·07	0	...	0	-0·1	6·4	...	0	1	2	3	4	15	5	1	0	3	2	0	1	4	15	2	4	0		Phalodi
-0·4	0·6	0	-0·10	0	...	0	-0·5	4·5	-0·2	1	0	0	1	1	2	4	5	17	1	1	0	1	5	4	3	0	16		Barmer
																																Rajasthan, East
...	0·5	0	...	0	...	0	...	3·1	...	0	0	4	3	5	4	2	0	13	1	3	0	2	1	5	9	7	3		Sikar
-0·9	0·2	0	-0·48	0	...	0	-0·7	3·1	-0·1	8	4	3	2	0	0	0	3	11	6	2	1	0	0	0	3	16	2		Jaipur*
-0·9	0·3	0	-0·38	0	...	0	-0·7	2·5	+0·4	1	1	0	0	1	4	4	1	19	7	4	0	0	0	2	3	0	15		Ajmer
-1·3	0·2	0	-0·65	0	...	0	-1·0	1·7	+0·2	1	0	1	0	0	1	4	2	22	2	0	0	0	0	0	0	9	20		Kotah
-1·1	0·8	0	-0·55	0	...	0	-1·5	1·2	-0·4	1	2	1	0	0	0	2	1	24	5	5	2	0	0	0	0	5	14		Jhalawar
-0·7	0·7	0	-0·57	0	...	0	-1·1	1·5	...	4	1	0	0	0	1	2	4	19	3	3	3	2	3	3	7	3	4		Udaipur
																																Madhya Bharat
...	0·7	0	...	0	...	0	...	1·3	...	2	0	1	0	1	3	8	7	9	5	0	0	0	0	0	2	13	11		Gwalior
-0·5	1·0	0·17	-0·88	0·17	1	1	-0·6	2·6	+0·9	2	2	5	3	1	1	5	0	12	17	1	0	1	0	1	3	6	2		Guna
-0·8	1·0	0	-0·62	0	...	0	-0·9	2·7	+1·3	2	4	0	1	1	2	2	4	15	2	18	2	0	0	2	4	1	2		Neemuch
...	3·1	0	...	0	..	0	...	3·4	...	8	8	4	1	1	2	1	3	3	9	8	4	0	1	1	4	4	0		Ratlam
-0·6	1·7	0·06	-1·15	0·03	1	0	-2·0	2·9	-0·6	3	6	2	4	1	1	1	3	10	8	11	4	4	1	0	0	2	1		Indore
-1·4	1·5	0·02	-1·64	0·02	2	0	-2·4	2·7	+0·4	3	3	1	0	2	4	3	1	14	5	7	5	2	1	0	1	8	2		Bhopal
-1·3	1·7	0·08	-1·58	0·08	1	0	-2·4	4·1	+0·8	3	4	2	1	0	1	1	2	17	7	9	4	1	1	0	1	3	5		Bairagarh
...	0·5	0·15	...	0·15	1	1	...	3·5	...	0	0	0	0	2	21	3	0	5	8	1	0	0	0	0	3	11	8		Madhosagar
																																Vindhya Pradesh
-1·2	0·7	0	-1·13	0	...	0	-1·5	1·3	+0·1	0	1	0	0	8	14	0	0	8	3	6	0	0	0	2	0	1	19		Nowgong
-1·2	0·6	0	-1·93	0	...	0	-2·2	2·2	+0·1	1	0	0	0	2	7	3	1	17	5	0	0	0	0	0	0	4	22		Sutna
-1·2	1·5	1·89	-0·58	1·15	12	2	-0·7	1·3	-0·5	4	2	0	1	0	0	0	1	23	1	3	0	0	0	0	0	1	26		Umaria
																																Madhya Pradesh East
...	1·2	0·75	...	0·63	14	2	...	1·9	...	11	9	4	1	0	1	0	4	1	4	5	1	0	1	0	0	1	19		Gondia
-1·4	2·2	1·10	-1·89	0·64	13	2	-2·1	2·3	+0·2	9	1	0	0	1	0	3	13	4	10	5	1	0	2	1	1	9	2		Pendra
...	2·3	0·38	...	0·20	14	2	...	3·5	...	19	1	1	0	1	0	0	8	1	13	4	0	2	1	0	1	6	4		Champa
-0·4	3·4	0·54	-1·63	0·47	14	1	-2·3	2·8	-0·6	6	5	2	0	1	0	0	1	16	7	11	3	1	0	0	0	1	8		Raipur
-0·8	4·0	0·03	-4·41	0·02	13	0	-5·3	2·1	-0·2	0	3	0	0	0	0	0	0	28	2	3	2	0	0	0	1	0	23		Kanker
-0·1	3·1	0	-2·04	0	...	0	-2·9	1·7	0	0	0	0	0	0	2	0	0	29	2	1	0	3	0	0	0	0	25		Chanda
-0·3	3·3	0·83	-3·53	0·70	14	2	-3·7	2·1	+0·3	0	0	0	0	0	0	0	12	15	3	19	3	0	1	0	1	2	2		Jagdalpur
																																Madhya Pradesh West
...	2·7	0·03	...	0·03	1	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		Buldhana
-0·1	2·7	0·05	-1·77	0·05	13	0	-2·5	3·2	+0·5	0	1	5	3	4	4	1	4	9	9	8	5	2	0	0	1	4	2		Akola
-0·4	3·6	1·51	-0·40	1·51	13	1	-1·6	5·0	+1·8	0	29	0	2	0	0	0	0	0	0	27	0	2	0	0	0	2	0		Amravati
...	3·7	0·28	...	0·26	12	1	...	5·0	...	3	17	0	1	0	3	0	7	0	4	25	0	0	0	0	1	1	0		Yeotmal
-0·3	1·6	0	-1·39	0	...	0	-2·0	2·7	+0·1	1	2	1	1	5	3	3	4	11	10	16	1	0	0	0	0	3	0		Khandwa *
+0·1	2·1	0	-1·28	0	...	0	-2·0	1·0	-0·3	0	0	1	0	0	0	0	0	30	2	3	0	0	0	0	0	0	26		Hoshangabad
-0·8	1·4	0	-1·09	0	...	0	-1·9	7·3	-0·4	2	4	3	2	1	9	5	1	4	2	16	1	0	0	2	2	7	1		Sagar
-0·2	1·3	0·41	-1·47	0·37	13	1	-1·3	2·0	+0·6	0	2	1	18	3	0	0	0	7	0	11	2	3	0	0	0	1	14		Jabalpur
-1·3	1·1	0·98	-1·29	0·90	14	1	-2·1	3·1	+0·7	4	1	0	0	0	0	0	0	26	12	4	6	5	0	0	0	0	4		Seoni

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
Madhya Pradesh West (Contd.)																						
Chhindwara ...	2,248	935·5	...	932·7	86·7	...	91	2	60·8	...	55	27,28,29	72·2	81·9	62·4	63·0	15·3	...	12·0	57	...	3
Betul ...	2,144	939·1	...	936·3	85·5	...	89	17	58·6	...	51	27	73·3	79·7	63·4	64·6	15·9	...	14·7	57	...	4
Nagpur ...	1,010	976·5	−0·7	973·0	90·9	+0·3	95	3,6,7	64·4	−2·1	58	5 days	76·2	85·8	66·5	68·5	16·2	−2·5	17·7	50	−1	3
Gujarat																						
Deesa * ...	466																					
Surat ...	39	1009·9	−0·3	1006·3	97·6	+3·5	100	6 days	72·3	+0·2	65	28	77·5	92·5	70·6	75·3	22·4	−1·4	22·1	70	+2	4
Ahmedabad ...	181	1005·2	−0·6	1002·0	95·8	−1·4	98	21	65·5	−3·9	59	31	76·3	92·2	67·7	72·2	19·2	−0·5	17·9	63	−1	3
Dohad ...	1,093	974·0	...	970·8	92·2	−0·7	95	23	65·9	−1·0	60	28	74·4	88·4	65·9	68·6	17·9	−2·3	14·9	62	−9	3
Baroda ...	115	1007·2	...	1003·8	96·0	+0·6	98	6 days	64·8	−1·3	58	31	75·6	89·6	69·3	73·8	21·6	−0·3	21·3	72	0	4
Saurashtra & Kutch																						
Bhuj ...	343	999·9	0	996·9	95·9	−0·2	100	14	69·0	−1·5	64	31	76·8	93·4	68·4	67·8	19·8	−0·7	11·7	64	+5	2
Dwarka ...	37	1010·5	−0·2	1008·0	86·3	−1·0	98	12	74·6	−0·9	71	23	78·4	82·3	75·1	76·3	28·3	+2·4	28·2	85	+6	7
Jamnagar ...	61	1009·4	−0·3	1006·5	93·8	−0·5	98	4 days	68·5	−1·3	63	31	78·0	89·2	72·1	73·6	24·2	0	21·3	74	−5	4
Rajkot ...	432	996·3	−0·5	993·2	96·6	+0·8	99	5 days	68·7	0	63	31	75·1	94·2	68·2	67·4	20·4	−0·8	10·8	66	−5	1
Veraval ...	26	1010·3	−0·5	1007·4	92·0	...	99	12,20,31	68·6	...	63	22	76·8	84·6	69·3	78·1	21·0	...	29·9	68	+2	7
Bhavnagar ...	55	1009·3	−0·5	1005·9	96·2	+0·4	99	22	70·0	−0·7	65	31	75·4	93·5	65·8	70·2	17·4	−3·0	14·6	58	−1	2
Konkan																						
Dahanu ...	15	1009·9	...	1007·2	89·5	...	97	18	73·0	...	66	22	78·9	85·6	73·3	79·7	25·5	...	32·0	76	...	7
Bombay ...	35	1009·5	−0·6	1006·4	89·5	+0·7	93	21,31	75·4	−0·2	70	30	80·9	84·7	75·1	77·4	27·1	−1·2	28·8	76	−5	7
Alibag ...	23	1010·3	−0·1	. .	88·5	0	93	31	72·9	−1·6	67	22,30	78·3	...	73·1	...	25·5	−1·2	...	77	+1	...
Harnai ...	66	1008·5	...	1005·8	86·5	...	95	20	76·7	...	73	28	80·5	83·9	72·8	76·7	24·1	...	28·1	69	...	7
Devgad ...	117	1006·1	...	1003·2	87·0	...	92	21	73·6	...	70	21 26,27	76·2	84·7	72·6	77·2	25·8	...	28·6	84	...	7
Vengurla ...	29	1009·4	...	1006·3	88·0	...	95	28	71·1	...	64	26,27	78·3	83·2	73·6	77·0	26·2	...	28·9	79	...	7
Marmagao ...	202	1003·3	−0·8	1000·6	85·6	−0·3	91	20	73·6	−1·1	69	27	78·2	82·0	73·9	75·6	26·7	−1·1	27·3	81	−1	7
Honavar ...	85	1007·7	...	1004·6	87·7	...	92	4,26,27	72·7	...	65	26	77·8	82·9	73·8	76·8	26·7	...	28·8	82	...	7
Deccan (Desh)																						
Jalgaon ...	660	987·6	...	985·2	94·5	...	97	13,16	62·6	...	52	30	71·5	91·3	64·3	68·2	17·3	...	13·1	64	...	2
Malegaon ...	1,432	962·8	−0·5	959·4	91·0	−0·7	93	4 days	66·1	+0·2	56	30,31	75·7	86·9	65·5	66·2	16·9	−2·1	12·7	55	−8	2
Deolali ...	1,374	947·5	...	...	88·0	...	91	22	61·9	...	51	28,30,31	72·8	...	64·8	...	17·7	...	...	65	...	.
Ahmednagar ...	2,154	938·7	−0·6	935·1	88·0	−0·6	91	3	64·5	−1·1	56	21	72·8	83·7	63·7	65·7	16·5	−2·1	14·3	59	−5	3
Poona ...	1,834	949·0	−0·7	945·5	88·5	−0·9	91	24,25	64·1	−2·2	56	28	70·8	83·0	66·5	68·5	20·4	−0·5	17·9	79	+2	4
Sholapur ...	1,570	957·6	−0·6	953·9	89·8	−0·8	94	3	66·5	−2·3	60	6 days	76·5	85·2	66·7	68·3	18·3	−1·4	16·8	60	−4	4
Miraj ...	1,817	949·0	−1·0	945·5	86·5	−0·4	91	4	64·7	−3·6	56	26,29	70·7	82·0	65·6	68·2	19·5	−1·5	17·9	76	+4	5
Kolhapur ...	1,885	947·2	...	943·8	86·2	...	90	2,3	64·8	...	57	22	71·3	81·3	66·0	67·9	19·6	...	17·8	76	...	5
Bijapur ...	1,950	944·6	−1·0	940·8	86·6	−2·1	91	3	64·8	−4·0	56	29	74·2	83·5	66·0	68·3	18·5	−2·1	17·5	65	−3	4
Belgaum ...	2,562	923·6	−1·4	921·0	82·1	−1·3	86	2	63·5	−1·9	55	27	67·3	78·4	64·4	67·3	19·4	−1·5	18·3	84	+4	5
Gadag ...	2,131	938·8	−0·6	935·5	87·2	+0·4	92	3	65·2	−3·8	60	7,20	75·3	81·4	67·1	68·4	19·3	−2·2	18·4	66	−9	5
Hyderabad, North																						
Aurangabad ...	1,905	947·0	−0·7	943·8	88·5	−1·2	92	3	65·6	−1·3	57	21	74·5	84·1	64·8	69·0	17·1	−0·9	18·1	59	−11	4
Parbhani ...	1,350	963·7	...	960·4	91·2	...	96	3	65·3	...	58	19,27	75·7	86·4	65·4	66·4	16·7	...	13·1	55	...	3
Ramagundam ...	527	992·1	...	988·8	92·1	..	97	7	76·5	...	68	11	80·3	88·0	72·7	80·3	24·1	...	31·8	69	...	7
Nizamabad ...	1,250	967·5	−1·3	963·9	90·0	+0·7	94	4,7	66·4	−1·6	59	25,28	74·0	87·0	67·1	68·5	19·4	−1·8	15·4	68	−2	3
Bidar ...	2,178	936·8	...	933·8	85·7	+0·1	91	6	68·5	−1·1	64	21,28	75·4	80·4	65·2	65·3	17·1	−3·6	15·2	57	−13	4

* Data not reliable

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.										
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Madhya Pradesh West *(Contd.)*
·7	...	1·7	·0	...	0	...	0	...	2·8	...	1	3	3	1	0	0	4	2	17	8	13	1	4	0	1	0	2	2	Chhindwara
·9	...	1·9	0·14	...	0·14	14	1	...	2·5	...	0	2	7	7	1	0	1	1	12	6	15	4	0	0	0	0	0	6	Betul
·9	−0·5	2·5	0·46	−1·71	0·25	14	2	−1·1	3·2	...	8	12	0	0	0	0	0	4	7	1	12	13	1	0	0	0	0	4	Nagpur
																													Gujarat Deesa *
·1	−1·1	2·1	0	−1·51	0	...	0	−2·0	3·4	+0·8	4	6	6	6	1	0	0	1	7	0	5	0	1	0	11	3	11	0	Surat
·2	−1·1	0·6	0	−0·35	0	...	0	−0·7	2·2	−0·8	4	8	6	2	0	0	1	6	4	1	9	3	1	0	1	0	8	8	Ahmedabad
·9	−1·2	0·5	0	−1·40	0	...	0	−2·0	3·9	...	2	3	7	5	3	2	0	1	8	7	3	3	0	1	4	7	3	3	Dohad
·3	−1·1	0·9	0	−1·76	0	...	0	−1·3	0·9	−1·0	1	3	1	0	0	0	0	0	26	2	4	1	0	0	0	3	6	15	Baroda
																													Saurashtra & Kutch
·3	−0·8	0·4	0	−0·33	0	...	0	−0·5	3·1	−1·4	1	1	0	1	0	0	1	0	27	2	3	0	0	1	8	10	3	4	Bhuj
·0	−0·9	0·3	0	−0·25	0	...	0	−0·3	8·0	+1·1	11	4	1	2	1	1	2	8	1	2	1	0	0	0	1	7	20	0	Dwarka
·4	−0·5	0·6	0	−0·31	0	...	0	−0·5	8·3	...	0	1	3	2	5	7	4	2	7	7	3	0	0	0	0	8	13	0	Jamnagar
·0	−0·8	1·8	0	−0·57	0	...	0	−1·1	4·9	+0·7	4	4	4	0	0	2	5	2	10	5	8	5	0	1	0	5	7	0	Rajkot
·0	−0·8	0·6	0	−0·62	0	...	0	−0·8	8·4	...	14	5	0	0	0	0	0	4	8	1	0	0	0	1	1	13	14	1	Veraval
·3	−1·9	0·7	0	−0·90	0	...	0	−0·9	2·7	0	1	0	0	0	0	2	7	4	17	1	6	15	3	3	1	0	0	2	Bhavnagar
																													Konkan
·0	...	1·8	0	...	0	...	0	...	6·7	...	1	3	17	10	0	0	0	0	0	10	0	0	0	0	0	8	13	0	Dahanu
·8	−0·3	2·6	1·38	−1·16	1·28	8	1	−2·1	3·8	−2·3	1	11	12	6	1	0	0	0	0	9	0	0	0	1	0	3	18	0	Bombay
·2	−0·7	...	4·09	−0·94	2·03	7	3	−2·1	2·3	−2·9	2	3	3	1	1	0	1	0	20	...	...	...	...	...	...	...	...	...	Alibag
·0	..	·1	0·95	...	0·55	14	3	...	6·6	...	2	8	4	5	0	2	3	5	2	1	0	0	1	0	4	9	16	0	Harnai
·5	...	3·4	3·88	...	1·97	9	7	...	2·1	...	2	6	14	5	1	0	0	3	0	0	0	1	1	1	1	18	9	0	Devgad
·3	...	3·8	3·66	...	1·66	14	4	...	...	...	2	2	0	0	0	0	0	1	26	0	0	0	0	2	3	10	0	16	Vengurla
·6	−0·6	3·8	1·66	−4·82	1·12	14	4	−3·9	5·5	+0·8	0	8	13	4	4	0	1	1	0	2	0	0	1	2	6	13	7	0	Marmagao
·3	...	5·0	2·25	−4·97	1·08	9	5	−2·9	2·0	...	0	1	19	1	0	0	2	0	8	0	0	0	1	3	1	13	6	7	Honavar
																													Deccan (Desh)
·3	...	1·9	0·29	−1·15	0·24	3	1	−0·8	2·5	...	0	3	8	7	1	2	4	2	4	5	19	3	1	0	0	0	3	0	Jalgaon
·6	−1·0	2·7	0·78	−0·93	0·57	3	2	−0·7	3·2	−0·7	0	2	0	0	1	0	3	6	19	1	11	0	0	0	0	1	1	17	Malegaon
·5	...	...	1·54	...	0·70	1	4	...	3·1	...	3	3	1	0	1	3	0	0	20	...	...	...	...	...	...	...	...	...	Deolali
·3	−0·2	3·2	1·15	−1·02	0·62	5	3	−0·4	4·4	−0·4	2	2	0	0	0	1	0	16	10	1	20	4	0	1	1	0	3	1	Ahmednagar
·7	−0·5	3·7	2·83	−0·71	0·97	8	6	+0·9	1·6	−2·4	0	0	1	0	0	2	6	0	22	0	1	11	2	1	1	5	0	10	Poona
·0	−1·1	3·6	3·00	−0·04	0·62	15	7	+2·7	5·2	−0·7	1	13	2	2	2	0	0	0	11	1	13	6	2	0	2	0	4	3	Sholapur
·3	+0·3	3·7	6·87	+2·75	2·47	14	11	+4·6	4·6	−0·8	3	3	3	1	0	0	8	10	3	6	9	5	3	1	1	3	3	0	Miraj
·9	...	3·3	7·64	...	1·88	7	8	...	4·8	...	1	6	1	0	0	3	3	0	17	4	12	2	0	1	0	10	1	1	Kolhapur
·0	+0·1	4·7	4·10	+1·21	1·77	13	5	+0·9	2·8	−0·5	13	6	1	0	1	0	1	4	5	10	14	1	1	0	0	0	1	4	Bijapur
·5	+2·6	6·8	8·21	+3·44	2·53	10	13	+5·5	3·3	+0·2	10	1	1	1	5	2	5	0	6	8	1	0	0	4	6	6	0	6	Belgaum
·6	+0·5	5·6	3·94	+0·13	1·27	9	8	+0·7	3·7	−1·4	1	0	2	3	1	4	11	9	0	1	0	3	4	1	3	10	7	2	Gadag
																													Hyderabad, North
·5	−0·5	3·8	1·16	−0·63	0·38	14	4	+1·2	4·5	−0·4	4	5	8	0	0	1	1	2	10	16	6	3	0	0	0	1	3	2	Aurangabad
·8	...	3·1	1·03	−1·06	0·61	4	4	+1·0	...	...	0	8	5	0	0	0	1	0	17	28	1	1	0	0	0	0	0	1	Parbhani
·8	...	2·6	1·35	...	1·35	14	1	...	3·4	...	2	1	0	6	9	1	2	1	8	1	16	0	4	6	0	0	0	3	Ramagundam
·3	−0·3	3·0	2·14	+0·14	2·12	9	1	−2·0	2·2	−0·1	1	1	0	2	0	1	0	1	25	11	10	0	1	0	0	0	1	8	Nizamabad
·4	−0·6	3·8	2·17	−0·04	1·58	15	4	+0·3	5·5	0	7	4	6	4	3	3	0	3	1	5	13	8	1	1	1	0	0	2	Bidar

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hyderabad. South																						
Gulbarga ...	1,503	959·3	-1·0	955·7	89·2	-1·3	94	3,4	67·5	-1·5	58	28,29	76·6	84·4	66·9	67·7	18·6	-2·0	16·4	60	-6	44
Raichur ...	1,311	965·8	-0·8	962·0	89·2	-0·7	95	3	70·8	-1·4	61	23	76·3	85·0	68·5	68·6	20·2	-2·6	16·4	66	-1	41
Hyderabad (Begumpet) ...	1,778	950·1	-0·7	947·2	88·1	-0·1	93	5	67·0	-0·7	57	24	75·8	81·7	68·0	68·2	20·1	-2·1	18·1	66	-6	50
Hanamkonda ...	881	980·0	-1·2	976·7	90·8	+1·3	95	6.8	70·8	-0·1	62	24,25	78·9	85·4	69·9	70·3	20·9	-3·5	18·5	63	-10	45
Khammameth ...	367	997·2	...	993·8	91·8	...	96	7	72·3	...	63	24,26,27	79·6	87·2	72·9	73·9	24·6	...	22·6	69	...	54
Coastal Andhradesa																						
Nellore ...	66	1007·1	-1·3	1004·1	90·3	-0·4	95	5 days	75·3	-0·6	70	19,27	80·9	83·8	75·6	76·4	27·9	-1·1	27·7	78	-1	71
Ongole ...	38	1008·2	...	1005·0	90·8	...	96	1	75·3 (a)	...	71	6 days	80·9	84·6	74·1	75·8	25·7	...	26·5	73	...	66
Masulipatam ...	10	1009·2	-1·4	1005·9	87·8	-0·8	95	8	76·5	+0·5	71	19,27	81·2	83·3	76·4	76·1	28·8	-0·8	27·6	79	-1	72
Kakinada ...	26	1008·6	-1·4	1005·6	88·9	+1·0	97	8	75·9	0	69	19	82·0	84·1	76·4	76·7	28·6	+0·2	28·0	77	0	71
Visakhapatnam ...	126	1004·9	-1·7	1002·3	87·5	-0·1	91	4 days	76·6	+0·1	71	19	82·4	82·3	74·6	76·1	25·8	-1·6	27·9	69	-4	73
Calingapatam ...	19	1008·5	-1·8	1005·7	88·5	+0·4	96	6,8,10	75·4	-0·3	71	23	78·8	84·4	74·8	77·5	27·7	-1·3	29·0	83	+2	73
Rentachintala ...	348	998·0	...	994·3	92·3	+0·8	97	1,3,8	72·4	-1·4	62	24,25	79·9	87·2	72·0	71·6	23·3	-2·2	19·4	67	-7	46
Rayalaseema																						
Cuddapah ...	428	995·5	-0·9	991·6	89·6	-2·4	95	2	73·3	-1·2	64	28	80·1	84·9	74·8	78·6	27·1	+0·8	29·8	77	+4	75
Bellary ...	1,473	959·7	-1·4	956·4	87·2	-2·6	93	3	70·6	-0·7	64	24,25,27	75·9	83·0	69·2	69·8	21·4	-0·6	18·9	67	-2	52
Kurnool ...	923	978·5	-1·0	971·9	89·2	-1·4	94	3	68·7	-3·0	57	24	76·6	84·2	70·3	71·7	22·5	-1·1	20·9	72	0	54
Anantapur ...	1,147	970·7	...	966·9	88·4	...	95	3	69·5	...	60	26	76·5	85·1	70·2	71·1	22·4	...	19·7	72	...	48
Tamilnad																						
Pamban ...	37	1008·9	-0·5	1005·6	86·6	-1·3	89	11	78·0	+0·3	73	25,26	81·6	82·1	76·7	76·7	29·2	-0·7	28·9	79	-1	77
Mathurai ...	437	995·1	-0·9	991·6	90·5	+0·3	95	31	73·6	-1·0	71	11	80·0	84·5	74·2	75·5	26·3	-0·5	26·0	76	-2	65
Nagapattinam ...	31	1008·9	-0·8	1005·7	87·6	-1·1	93	3,30	75·7	-0·8	70	13	80·1	83·7	75·9	76·2	28·6	-0·3	27·5	82	+3	71
Tiruchi ...	295	1000·1	-1·0	996·2	89·2	-1·2	94	31	74·3	+0·3	71	29	78·7	86·0	74·4	75·5	27·2	-0·5	25·4	81	+2	61
Coimbatore ...	1,341	964·7	-0·9	961·3	86·8	-0·9	90	1	70·4	-0·3	65	27	75·5	80·3	70·5	72·0	23·3	-2·2	23·1	77	-4	66
Salem ...	913	978·9	-1·1	974·9	88·0	-1·8	93	31	71·3	-0·6	63	28	75·5	83·8	71·9	73·5	25·1	-0·8	23·5	83	+5	61
Kallakurichi ...	416	995·4	...	991·7	89·8	...	96	9,31	73·4	...	66	29	78·9	84·8	73·4	73·5	25·6	...	23·1	76	...	59
Cuddalore ...	39	1008·2	-1·2	1005·0	89·3	+0·8	96	7,31	74·8	-0·4	70	16	80·9	83·5	75·4	76·4	27·6	-1·7	27·6	77	-4	72
Vellore ...	703	985·7	-0·7	982·1	89·0	+0·1	94	31	71·8	-1·0	62	28	78·1	83·8	72·8	73·9	25·2	-1·5	24·1	77	-3	63
Madras ...	51	1007·9	-1·1	1004·8	88·9	-1·2	94	8	75·0	0	70	27	80·5	82·9	75·5	75·8	27·8	-0·8	27·2	79	-1	71
Arogyavaram ...	2,299	932·8	...	929·8	82·3	...	87	2,3,6	66·4	...	60	22,29	72·9	77·8	66·4	67·4	19·9	...	18·6	73	...	59
Malabar And South Kanara																						
Mangalore ...	72	1008·1	-0·7	1005·0	85·4	-0·5	92	24	73·5	-1·1	69	27	77·6	82·4	73·6	76·2	26·5	-2·0	28·0	82	-2	75
Kozhikode ...	27	1009·6	-0·8	1006·5	86·8	+0·5	90	13 24	73·8	-1·0	69	27	79·0	82·7	75·3	77·1	28·3	-0·5	29·2	84	-2	79
Palghat ...	319	999·7	...	996·3	86·5	...	91	24	73·1	...	69	9	77·6	80·8	74·3	74·8	26·8	...	26·7	85	...	75
Mysore																						
Chitaldrug ...	2,405	929·1	-1·3	925·7	83·4	-1·8	86	4 days	67·5	-0·7	61	27	72·3	80·2	67·2	67·9	20·7	-0·8	18·3	77	+2	53
Hassan ...	3,149	905·8	...	902·9	80·2	-2·0	83	1,3,31	63·1	-1·6	55	26	67·8	76·0	64·3	66·1	19·1	-2·0	18·0	83	+3	60
Bangalore ...	3,021	909·6	-1·0	906·7	80·1	-1·6	84	31	64·6	-0·3	59	27	69·8	74·7	65·2	65·6	19·2	-2·0	17·9	79	-2	63
Mysore ...	2,518	926·0	-1·0	922·9	82·6	-1·6	86	1,4,31	65·6	-1·4	58	27	70·4	78·9	66·4	67·6	20·5	-1·6	18·5	81	0	57

(a) Mean of 30 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Hyderabad, South
3·5	−0·1	4·0	2·13	−0·56	0·83	7	4	0	6·1	+0·5	7	11	6	2	1	1	1	2	0	5	15	6	1	2	0	1	1	0	Gulbarga
3·7	+1·0	4·9	4·33	+1·28	2·69	8	5	+0·7	5·3	−0·4	4	5	4	3	0	3	1	8	3	3	13	6	3	0	1	1	4	0	Raichur
3·5	−0·9	4·7	2·08	−0·37	1·44	9	3	−1·3	4·6	+0·8	3	6	3	2	0	1	1	3	12	9	10	3	1	2	1	1	1	3	Hyderabad (Begumpet)
3·3	−1·0	3·4	1·31	−1·30	1·31	8	1	−3·1	4·1	+1·1	11	5	0	2	4	2	1	3	3	12	13	2	2	2	0	0	0	0	Hanamkonda
3·6	...	4·8	0·10	...	0·05	8·9	0	...	3·1	...	18	1	1	3	2	1	4	0	1	14	4	8	2	3	0	0	0	0	Khammameth
																													Coastal Andhradesa
3·7	−0·3	5·0	25·64	+16·08	17·48	18	6	−2·9	2·5	−0·4	1	1	0	0	1	0	2	7	19	1	0	16	0	0	1	1	2	10	Nellore
3·9	...	4·6	3·60	..	1·68	18	7	...	6·1	...	3	0	4	1	0	0	2	3	18	2	0	14	1	0	0	4	1	9	Ongole
3·3	+0·5	5·0	3·99	−4·61	2·02	9	8	−0·5	4·8	+1·2	8	5	2	0	1	0	3	3	9	6	6	4	5	4	0	1	0	5	Masulipatam
3·2	−0·9	3·9	9·45	+0·93	6·02	19	8	−0·6	6·3	+1·4	1	6	2	1	0	7	0	9	5	0	6	3	13	1	5	0	3	0	Kakinada
3·7	−0·6	5·1	11·18	+3·35	4·02	19	7	−1·3	4·3	+1·1	7	6	2	1	0	2	10	3	0	3	7	8	2	9	1	0	0	1	Visakhapatnam
3·5	+2·1	6·1	4·80	−3·07	3·15	19	6	−1·3	7·5	+2·8	5	1	1	0	0	0	10	14	0	1	6	12	6	3	2	0	1	0	Calingapatam
1·5	−0·6	5·9	3·17	−1·82	1·16	3	4	−3·6	3·6	−1·2	3	1	1	1	0	3	7	5	10	12	2	4	1	2	0	2	0	8	Rentachintala
																													Rayalaseema
1·6	+0·4	5·0	4·01	−0·85	1·25	18	7	+0·2	1·7 (e)	−2·0	0	0	2	0	0	0	1	2	26	1	1	11	0	0	0	0	1	17	Cuddapah
3·0	+0·9	5·2	8·49	+1·33	3·47	6	8	+2·1	2·9	−0·3	0	2	0	1	0	1	0	5	22	2	11	1	1	0	0	0	6	10	Bellary
3·5	−0·2	4·9	2·62	−0·58	0·97	11	4	−0·9	2·7	−0·4	0	1	1	2	2	7	6	2	10	2	6	6	4	1	2	0	4	6	Kurnool
1·2	...	4·5	4·83	+0·89	1·50	9	7	+1·5	4·3	...	1	1	4	0	1	2	3	5	14	11	5	7	1	0	0	1	0	6	Anantapur
																													Tamilnad
5·1	+1·5	6·0	5·93	−2·61	2·00	12	8	−1·4	7·5	+0·3	2	2	2	2	9	10	2	2	0	0	3	2	9	13	4	0	0	0	Pamban
5·0	+0·9	6·4	11·05	+3·63	3·81	12	14	+3·8	2·1	−0·6	1	0	0	0	0	1	2	15	12	2	2	1	3	3	2	1	1	16	Mathurai
5·0	+1·0	5·5	11·09	+0·51	3·93	15	9	−1·2	3·6	−0·7	1	0	0	0	1	9	11	4	5	2	8	4	4	3	4	2	0	4	Nagapattinam
5·8	+1·3	5·9	2·86	−4·35	1·57	4	6	−3·5	6·4	+0·7	3	2	0	0	0	1	2	23	0	4	8	3	1	1	3	3	6	2	Tiruchi
4·4	+0·1	5·5	3·56	−2·75	1·07	18	7	−2·7	4·5	+1·8	4	4	1	0	9	9	1	0	3	4	3	1	0	7	10	4	2	0	Coimbatore
4·8	+0·2	5·5	6·49	+0·05	2·23	13	12	+2·3	2·8	+0·4	1	0	0	1	2	7	11	2	7	2	0	8	0	5	2	3	0	11	Salem
4·6	...	6·0	3·85	...	1·38	12	7	...	...	...	2	0	0	0	1	1	0	0	27	0	7	0	2	3	1	0	0	18	Kallakurichi
5·5	+0·9	5·0	4·82	−6·71	1·96	16	9	−1·8	4·4	+1·3	3	1	0	0	2	7	7	7	4	0	8	1	14	0	3	0	2	3	Cuddalore
3·4	−0·4	5·7	3·11	−3·69	1·02	5	7	−2·2	3·3	+1·3	3	0	0	2	0	2	0	2	22	8	8	8	4	1	1	0	0	1	Vellore
4·5	−0·1	5·6	5·86	−6·18	3·13	17	6	−4·7	7·1	+0·4	2	0	0	0	1	3	13	9	3	6	6	8	6	1	0	0	3	1	Madras
5·3	...	6·5	3·13	...	1·11	9	7	...	2·8	...	2	0	0	4	1	0	1	4	19	11	6	1	0	1	0	0	8	4	Arogyavaram
																													Malabar And South Kanara
4·8	0	5·0	6·63	−1·52	3·42	17	7	−3·4	4·5	+0·4	2	1	22	4	0	0	0	1	1	1	0	0	0	3	10	11	6	0	Mangalore
5·1	−0·1	5·9	10·76	+0·49	4·53	4	12	+0·8	6·1	+1·7	2	14	10	1	1	0	1	2	0	1	0	0	0	1	6	15	8	0	Kozhikode
4·3	...	5·4	5·35	...	1·42	18	8	...	3·9	...	0	0	4	1	0	1	19	1	5	0	0	0	0	0	2	24	3	2	Palghat
																													Mysore
4·7	+0·1	5·0	3·45	−1·31	0·88	11	8	+1·6	2·6	−1·1	0	2	10	1	0	7	7	3	1	3	2	9	2	1	2	8	3	1	Chitaldrug
5·7	+0·8	6·6	5·52	−0·55	1·50	4	10	+0·9	4·6	+1·3	4	4	6	1	0	4	8	0	4	6	4	4	1	1	4	8	3	0	Hassan
4·8	−0·5	5·9	7·14	+1·27	1·54	14	9	+0·5	4·5	+0·4	6	3	0	2	0	3	6	3	8	9	6	0	1	0	5	2	7	1	Bangalore
4·7	−0·7	5·1	3·10	−3·78	1·19	15	4	−4·6	3·9	−0·7	4	1	2	0	4	3	7	0	10	6	6	3	0	1	6	6	1	2	Mysore

(e) Mean of 26 days

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Travancore-Cochin																						
Fort Cochin ...	10	1010·6	−0·9	1007·5	84·2	−0·1	87	20	74·8	−0·5	72	18	79·3	81·5	75·2	76·3	27·9	−0·7	28·7	82	0	77
Alleppey ...	12	1010·5	...	1007·4	85·3	...	87	8 days	74·2	...	70	18	80·5	81·9	76·6	76·2	29·5	...	28·3	83	...	77
Trivandrum ...	211	1003·6	−0·7	1001·3	85·4	...	88	1,2	73·3	...	70	24	77·8	79·9	75·0	75·5	28·3	+0·3	28·1	88	+3	81
Nagercoil ...	195	1004·0	...	1001·1	87·1	...	90	4 days	74·4	...	71	18,24	79·8	80·4	74·4	75·2	25·9	...	26·6	78	...	78
Hill Stations Excluding Kashmir																						
Aijal ...	3,599	...	...	...	74·2	...	79	3	...	...	...	...	69·3	69·6	67·7	68·4	22·5	...	23·3	92	...	94
Shillong ...	4,921	851·1	−1·1	848·4	70·9	−0·2	78	8.9	57·2	+2·4	48	16	65·4	64·4	61·3	62·0	16·9	+0·8	18·1	80	+8	87
Cherrapunji ...	4,309	870·1	−0·7	867·4	72·0	+0·1	76	5,6	63·0	+2·5	56	6	66·9	66·3	63·7	64·2	18·8	+1·2	19·6	84	+11	89
Darjiling ...	7,432	777·5	−1·3	775·2	65·1	+3·4	69	11	51·6	+1·4	47	16,19	58·8	55·5	55·8	52·9	14·1	+0·9	12·8	84	+3	86
Kalimpong ...	3,965	879·7	−2·1	877·1	73·5	+1·5	80	1	60·8	+0·5	55	23,24	64·1	66·9	62·3	63·8	18·5	+0·7	18·9	91	+12	84
Katmandu ...	4,388	868·9	...	865·8	80·8	+0·7	87	4 days	52·9	−3·5	45	31	64·3	68·9	59·9	61·5	15·9	+0·2	15·6	77	−7	65
Muktesar ...	7,592	773·6 (a)	−1·1	771·9 (a)	66·8	+1·8	72	5	49·3 (a)	−0·4	42	21	55·9	58·4 (a)	44·6	49·3	6·1 (a)	−2·8	8·7	40 (a)	−17	53
Mussooree ...	6,699	798·4	...	796·8	66·3	+2·2	72	8,27	52·7	+1·4	49	20,21	59·9	58·5	49·4	52·2	8·3	−1·2	11·3	47	−17	66
Simla ...	7,224	783·5	−0·4	782·7	66·7	+2·4	69	5.12,31	51·8	+0·4	49	19,21.24	58·3	59·1	44·3	48·9	5·0	−2·1	8·1	32	−12	49
Abu ...	3,945	882·3	−0·1	880·5	79·5	+0·4	83	19	62·1	−2·3	59	8	70·7	75·9	56·7	58·8	10·0	−1·5	10·0	39	−9	33
Pachmarhi ...	3,528	895·1	−0·5	892·8	80·5	+1·2	83	4 days	55·9	−3·0	49	27	69·3	76·9	60·2	62·3	13·9	−8·3	12·9	58	−2	42
Mahabaleshwar ...	4,534	863·0	−0·7	861·0	75·6	+1·4	79	2,4,5	60·1	−1·2	56	20	66·0	68·1	59·0	61·4	14·2	−1·8	15·9	66	−11	69
Mercara ...	3,781	885·3	−0·7	883·1	74·9	−0·4	77	4 days	60·7	−1·8	54	27,28	65·2	69·9	62·0	65·1	17·7	−1·8	19·2	84	−3	78
Kodaikanal ...	7,688	770·9	−0·4	769·0	61·0	−1·1	65	4 days	50·3	−0·9	45	27	53·6	55·3	51·4	54·2	12·0	−0·8	13·8	87	+7	94
Ootacamund ...	7,364	779·3	−1·0	777·5	63·8	−0·8	67	4	45·8	−4·7	35	27	54·3	57·6	51·6	54·5	12·1	−0·6	13·4	84	+5	82
Coonoor ...	5,730	825·7	...	...	68·0	−1·7	72	7.27	53·7	−2·4	45	28	55·8	...	60·9	...	16·8	+1·5	...	76	+1	...
Tibet																						
Lhasa ...	12,090	672·0	...	...	65·8	...	74	6	33·6	...	25	31	50·5	...	49·5	...	12·0	...	...	94	...	...
Gyantse ...	13,110	626·7	...	...	62·5	+1·9	77	7	28·9	+0·1	20	25	46·0	...	32·5	...	2·1	−3·7	...	20	−30	...
Ceylon																						
Colombo ...	24	1010·2	−0·8	1007·6	84·0	−1·7	86	4 days	73·5	−1·5	70	30	78·4	79·7	75·4	75·2	28·7	−0·2	27·6	87	0	81
Trincomalee ...	24	1009·3	−0·1	1006·4	87·7	−1·5	94	6	74·9	−0·6	72	16	79·4	80·6	74·9	76·1	27·5	−0·5	28·7	80	−2	79
Hambantota ...	61	1008·5	−0·6	1005·4	86·3	+0·1	92	15	74·7	−0·4	72	24,28,31	79·3	80·6	75·3	76·1	28·1	+0·2	28·7	81	−3	79
Mannar ...	12	1010·3	...	1007·3	85·5	...	92	13	76·5	...	72	12	80·2	81·4	76·1	76·9	29·1	...	29·5	84	...	80

(a) Mean of 30 days

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																				STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.										
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Travancore–Cochin
5	+1·7	6·7	14·68	+1·31	4·26	8	13	−1·2	5·2	+1·5	0	6	13	6	0	0	3	2	1	1	0	0	0	1	6	13	10	0	Fort Cochin
8	...	5·9	10·23	...	2·80	8	14	...	6·4	...	2	6	9	5	0	2	3	4	0	0	0	0	1	0	6	13	11	0	Alleppey
2	−0·3	5·9	7·16	−3·57	1·69	8	12	−0·2	4·4	+0·7	13	4	0	0	0	0	0	9	5	1	2	0	1	0	3	5	17	2	Trivandrum
5	...	6·7	5·82	...	1·27	17	10	...	7·0	...	0	0	0	0	0	0	13	15	3	1	0	0	0	0	0	27	3	0	Nagercoil
																													Hill Stations Excluding Kashmir
3	...	5·7	8·19	...	1·37	3	11	...	3·4	...	2	1	13	5	3	1	4	0	2	0	0	2	3	2	6	5	5	8	Aijal
9	+2·5	5·7	6·07	−0·65	0·91	21	17	+7·0	0·7	−0·5	0	1	0	0	0	3	0	0	27	0	0	0	0	0	3	0	0	28	Shillong
6	+1·8	4·7	11·29	−8·13	2·47	21	14	+4·7	4·0	+0·9	2	13	9	2	1	3	1	0	0	0	7	5	1	0	7	2	1	8	Cherrapunji
8	+0·5	4·1	2·78	−2·63	1·33	23	5	+0·2	4·4	+1·8	0	2	16	4	0	1	2	0	6	0	0	5	4	0	4	11	1	6	Darjiling
4	−0·6	2·7	3·61	−1·40	2·00	4	3	−1·8	6·4	0	1	0	0	0	0	0	3	21	6	0	0	0	28	1	0	0	2	0	Kalimpong
5	−3·1	2·3	0·31	−1·13	0·20	23	2	−1·2	6·8	0	0	0	1	1	1	1	0	0	25	0	0	2	0	0	1	0	0	28	Katmandu
1	−1·3	0·3	0·04	−1·84	0·04	21	0	−2·3	5·5 (a)	+0·8	1	6	7	3	1	1	6	2	4	0	0	0	2	0	8	15	4	2	Muktesar
2	−1·4	0·7	0	−1·14	0	...	0	−2·3	3·6	−0·7	2	2	0	3	4	1	0	0	18	1	0	0	7	9	1	0	0	12	Mussooree
2	−0·9	1·3	0·30	−0·88	0·30	12	1	−0·9	1·9	−0·9	0	0	0	2	4	3	0	1	21	3	1	1	0	9	9	1	2	5	Simla
1	−1·0	0·3	0	−0·76	0	...	0	−0·9	2·2	−1·2	2	1	1	0	0	1	1	5	20	2	0	0	1	3	1	0	2	22	Abu
5	−0·7	1·6	0·33	−2·07	0·23	1	1	−2·0	2·3	0	3	11	5	0	0	0	1	0	11	1	16	3	0	0	0	2	5	4	Pachmarhi
0	−0·8	4·0	8·23	+1·88	2·31	7	7	−0·9	6·3	−1·3	0	16	14	1	0	0	0	0	0	4	7	3	0	0	3	0	14	0	Mahabaleshwar
4	−1·0	4·9	5·59	−2·70	1·85	11	12	−0·9	5·0	+1·6	0	5	5	0	0	2	5	3	11	1	4	4	0	0	3	9	6	4	Mercara
0	+1·2	7·3	8·15	−2·09	2·02	13	15	−0·3	6·6	−0·2	5	2	0	1	3	1	3	12	4	2	2	0	0	2	0	4	6	15	Kodaikanal
0	−0·8	5·4	8·28	+0·30	1·88	13	9	−4·8	0·8	−2·0	3	1	1	0	0	0	1	0	25	2	0	1	0	0	0	2	0	26	Ootacamund
6	0	...	5·20	−4·93	1·42	13	14	−0·1	3·7	+0·9	5	0	0	11	4	1	4	6	0	...	...	...	...	...	...	...	...	...	Coonoor
																													Tibet
5	...	...	0·06	...	0·06	23	0	...	0	...	0	0	0	0	0	0	0	0	31	...	...	...	...	...	...	...	...	...	Lhasa
3	−0·3	...	0	−0·12	0	0	0	−0·5	3·0	0	0	3	2	8	1	0	0	0	17	...	...	...	...	...	...	...	...	...	Gyantse
																													Ceylon
0	+0·3	7·0	16·28	+1·83	2·87	17	18	+1·9	...	...	0	2	1	6	2	4	3	3	10	2	0	0	0	3	8	13	3	2	Colombo
0	+2·0	7·6	5·53	−2·13	1·24	16	8	−2·9	..	..	0	0	0	0	1	26	4	0	0	3	2	2	1	1	11	4	3	4	Trincomalee
5	+2·7	7·1	3·48	−0·80	0·74	26	9	+1·1	...	...	1	0	0	1	0	6	18	5	0	2	0	0	0	0	14	12	2	1	Hambantota
8	...	6·7	6·80	...	1·87	12	11	...	...	...	1	2	0	0	10	14	1	0	3	3	1	0	0	6	18	3	0	0	Mannar

TABLE *III*.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 4TH CLASS STATIONS— OCTOBER 1950

STATION	Maximum temperature, °F				Minimum temperature, °F				Mean dry bulb temperature 0830 hrs. I.S.T. °F	Mean wet bulb temperature 0830 hrs. I.S.T. °F	Vapour pressure, inches		Relative humidity %		Mean cloud amount, 0830 hrs. I.S.T.	Rainfall, inches				Number of rainy days (0·10″or more)		Wind	
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 0830 hrs. I S.T.	Departure from normal	Mean 0830 hrs. I.S.T.	Departure from normal		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Resultant direction 0830 hrs. I.S.T.	Velocity in miles per hour
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Assam																							
Lumding ...	85·9	+1·0	93	5,6	92·0	+2·1	66	15	78·1	74·8	28·0	+0·8	85	−2	...	3·41	−0·13	0·66	18	9	+3·1	...	...
Jammu and Kashmir																							
Jammu ...	88·6	+0·5	92	12	64·9	−2·3	61	25,30.31	68·3	60·9	14·6	+1·0	63	+10	0·4	0·02	−0·74	0·02	1	0	−1·1	N36E	...
Kargil (R) ...																							
Mysore																							
Balehonnur ...	78·3	−0·7	81	4,6,31	62·4	−2·0	55	25,28	67·6	65·7	21·0	−0·8	89	−3	...	6·43	−1·40	1·56	13	9	−2·4	...	...
Sikkim ...																							
Lachen ...	..	...	...	...	36·7	...	30	28	55·7	...	...	...	...	...	...	2·99	...	0·73	15	9	...	...	...
Tibet																							
Yatung (Chumbi)	61·3	+2·6	67	1	35·1	−1·8	26	17,18,19	49·0	44·9	8·8	0	75	−8	2·2	1·94	0	0·78	23	3	−0·4	...	...

(R) Register not received

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 5TH CLASS STATIONS— OCTOBER 1950

Division	Station	Rainfall, inches				Number of rainy days (0.10″ or more)		Division	Station	Rainfall, inches				Number of rainy days (0.10″ or mo	
		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal			Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Assam ...	Mawsynram ...	9·99	...	2·25	20	13	...	Jammu & Kashmir	Sonamarg ...	1·26	−1·27	0·47	18	3	−2·
West Bengal ...	Bankura ...	0·26	−2·86	0·09	29	0	−4·5		Gurez ...	0·99	−1·49	0·45	16	4	−2·
Bihar ...	Muzaffarpur ...	0	−2·41	0	0	0	−2·5	Deccan (Desh) ...	Khandala ...	5·83	−1·26	1·82	1	7	+0·
	Chapra ...	0·42	−1·69	0·42	25	1	−1·5	Tamilnad ...	Palayamcottai ...	6·73	−0·32	1·85	2	7	−1·
	Arrah ...	0	−2·42	0	...	0	−3·0	Sikkim ...	Thangu ...	2·35	...	0·63	15	2	...
Punjab (I) ...	Dalhousie ...	0·63	−0·71	0·63	2	1	−1·1		Lachung ..	0·03	−3·86	0·02	10	0	−9·
	Kyelang ...	0	−0·78	0	...	0	−1·3		Chungthang ...	1·54	...	0·31	15,23	7	...
	Gondla ...	0	...	0	...	0	...								
	Koksar ...	1·83	...	0·93	2	2	...								
	Kothi ..	0·39	...	0·39	1	1	...								
	Dharampore ...	0	−1·04	0	...	0	−1·3								
	Kharsali ...	0·06	...	0·06	15	0	...								
	Rana ...	0·25	...	0·15	16	2	...								
	Jamuna Chetty ...	0·27	...	0·20	13	1	...								

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Note :—Data upto 9·0 Km. a. s. l. are given under Table A and data above 9·0 Km. under Table B.

In Tables A and B

n represents the number of observations.

V represents the mean wind speed in m./second irrespective of direction.

v represents the resultant mean velocity in m./second.

D represents the direction of the resultant mean wind in degrees East of North.

For the co-ordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Report—January 1950 and subsequent issues.

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

OCTOBER 1950

TATION		AHMEDABAD												ALLAHABAD											
e in I.S.T.		0230				0730				1430				0230				0730				1430			
ght in Km.		n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ce	...	31	1·0	0·6	341	31	1·0	0·7	010	31	1·4	0·7	348	31	0·7	0·4	252	31	1·4	1·1	275	31	2·8	2·1	317
a.g.	...	31	4·9	3·1	336	31	5·8	3·8	018	31	2·8	1·5	357	31	4·1	1·9	330	31	4·0	2·3	271	30	4·7	3·5	332
a.s.l.	...	31	4·2	2·5	359	31	5·3	3·2	358	31	3·1	1·6	006	31	4·3	2·9	337	31	4·3	2·2	330	30	4·1	3·0	324
,,	...	31	4·1	2·3	23	31	4·5	2·3	010	31	2·9	1·4	003	31	5·4	4·3	323	31	5·3	4·0	328	30	4·4	3·4	316
,,	...	31	3·8	2·3	31	31	3·6	1·8	044	31	3·4	1·6	008	31	6·5	5·1	316	31	6·8	5·6	325	31	5·1	3·7	314
,,	...	31	4·2	2·4	35	31	4·2	2·5	046	31	4·2	1·8	014	31	7·3	5·4	317	31	8·2	6·5	328	31	6·2	4·2	316
,,	...	31	4·7	2·1	32	31	5·2	3·0	047	30	4·9	1·5	005	31	7·1	5·3	317	31	8·4	6·0	329	31	6·5	4·3	312
,,	...	31	4·9	1·6	25	31	5·8	2·5	044	31	5·5	1·0	338	31	6·7	4·6	311	31	7·5	4·5	331	31	5·8	3·7	303
,,	...	11	5·2	2·3	333	31	5·9	2·3	347	31	5·2	2·6	312	17	4·3	3·3	265	28	5·7	3·8	290	31	5·9	5·0	283
,,	...	3	8·5	5·7	299	31	7·1	4·7	303	30	7·3	4·5	300	1	7·0	7·0	215	26	6·8	5·6	262	30	8·7	8·1	266
,,	...	1	15·0	15·0	335	30	10·3	7·4	296	28	10·7	7·6	293	1	12·5	12·5	230	24	8·8	8·5	255	29	11·6	11·1	259
,,	...					30	13·7	11·2	292	28	14·7	12·0	287					22	13·8	13·2	248	28	17·3	16·7	250
,,	...					23	17·0	14·5	287	25	15·6	13·2	278					18	22·0	20·9	242	26	21·8	21·0	241

TATION		AMBALA												ANANTAPUR								ASANSOL			
e in I.S.T.		0230				0730				1430				0730				1430				0230			
ght in Km.		n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ce	...	31	1·4	0·9	342	31	0·7	0·2	54	31	1·6	1·4	306	31	1·2	0·2	309	31	2·6	1·6	34	31	1·1	0·7	280
a.g.	...	31	5·2	4·6	347	31	4·4	0·9	310	31	3·6	3·0	300	31	2·8	0·6	299	31	3·8	2·6	33	31	3·3	1·4	315
a.s.l.	...	31	5·6	5·4	338	31	4·8	2·4	330	31	3·9	3·3	307	31	3·4	0·6	354	30	3·8	2·4	29	31	3·7	1·8	341
,,	...	31	5·1	4·8	327	31	4·9	3·9	324	31	4·3	3·6	312	31	4·5	1·6	47	30	4·0	2·5	26	30	5·0	2·9	342
,,	...	31	5·3	4·9	316	31	4·8	3·8	313	31	4·7	3·9	315	29	6·1	4·6	46	31	4·9	2·8	26	28	5·0	3·0	328
,,	...	31	5·6	4·9	308	31	4·9	4·0	312	31	4·9	3·7	317	28	6·6	5·3	36	29	5·1	2·9	33	23	5·7	2·4	316
,,	...	31	5·7	4·6	310	31	5·1	3·5	311	31	5·0	3·3	307	28	6·0	4·6	35	29	5·1	3·0	38	13	3·6	0·2	209
,,	...	28	5·5	2·8	302	31	5·4	3·3	312	31	4·8	2·6	310	27	5·1	4·0	47	29	5·1	2·8	44	12	4·3	1·2	207
,,	...	2	8·5	8·5	320	28	5·4	2·3	311	31	5·2	2·3	306	24	4·8	2·5	55	27	4·6	1·4	47				
,,	...					24	5·9	3·2	313	31	6·1	4·7	298	19	5·8	2·8	46	21	3·6	0·8	29				
,,	...					24	8·3	6·8	288	30	9·3	7·5	292	16	4·5	1·8	39	31	4·2	0·9	45				
,,	...					14	13·3	11·7	292	19	14·8	13·0	279	15	4·5	0·4	61	16	4·3	0·4	154				
,,	...					13	18·4	16·8	291	12	19·0	17·0	285	13	5·1	1·5	181	14	5·6	1·5	148				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

OCTOBER 1950

TATION	ASANSOL								BANGALORE												BAREILLY			
e in I.S.T.	0730				1430				0230				0730				1430				0730			
ight in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ace ...	31	1·2	0·8	307	31	1·4	0·8	20	31	1·6	0·5	317	31	2·2	0·8	310	31	2·9	1·2	345	31	0·9	0·1	27
a. g. ...	31	3·8	2·3	322	31	3·2	1·9	28	30	4·5	0·8	335	31	4·8	2·4	340	31	4·3	2·0	345	31	3·4	1·2	283
a.s.l. ...	30	4·3	2·2	2	31	3·7	1·9	12													31	3·5	2·3	302
,, ...	29	4·9	2·8	1	31	4·3	2·3	3	31	3·6	0·9	327	31	3·8	1·7	329	31	4·3	2·0	342	31	4·0	3·2	306
,, ...	26	5·3	3·5	348	29	4·4	2·2	346	24	5·0	2·1	355	28	5·1	3·7	9	30	4·2	2·1	347	31	5·5	3·0	310
,, ...	25	5·3	2·6	337	28	4·5	1·8	324	21	4·6	2·8	10	24	4·3	2·2	30	25	3·6	1·6	358	30	6·1	4·4	317
,, ...	22	5·8	2·5	333	26	4·7	1·9	306	18	3·9	2·1	15	23	4·3	2·4	14	21	3·9	1·7	358	30	5·8	3·4	309
,, ...	19	6·0	2·3	253	23	5·5	3·4	275	9	3·5	1·2	336	22	4·4	1·1	20	17	4·2	1·4	334	28	6·0	2·5	322
,, ...	16	5·9	4·4	232	17	7·0	5·5	267					20	4·6	1·0	83	12	4·7	1·7	356	24	6·6	3·5	315
,, ...	12	8·0	5·7	250	11	8·1	7·0	255					20	4·9	2·2	65	10	4·3	1·3	7	20	5·9	2·6	284
,, ...	11	8·0	5·5	250	9	9·4	7·9	255					20	4·3	1·7	85	10	3·9	0·6	144	17	8·2	5·8	273
,, ...	7	11·8	10·6	244	7	11·4	10·2	252					17	4·2	2·3	72	9	4·2	2·8	119	13	11·8	10·8	281
,, ...	4	22·3	21·2	218	4	14·7	12·3	240					15	6·1	4·3	112	9	6·3	4·7	112	8	17·2	15·8	264

TATION	BAREILLY				BHAGALPUR								BHOPAL											
e in I.S.T.	1430				0730				1430				0230				0730				1430			
ght in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ce ...	31	1·6	1·3	295	31	0·9	0·2	360	31	1·5	0·3	329	31	1·3	0·6	35	31	1·1	0·5	21	31	2·7	1·5	6
a. g. ...	31	3·7	3·3	306	28	3·6	1·3	285	31	4·0	1·4	339	31	4·9	2·8	43	31	4·2	2·1	39	30	4·5	3·3	11
a.s.l. ...	31	3·8	3·3	304	28	4·4	1·5	350	31	3·9	1·6	340	31	4·8	2·7	47	31	3·6	1·6	37	30	4·3	2·8	9
,, ...	31	3·8	3·4	301	29	4·4	2·1	355	30	4·0	1·4	331	31	4·3	2·7	40	31	4·4	3·1	37	31	3·9	2·8	4
,, ...	31	4·7	3·8	305	29	4·3	2·0	4	30	3·9	0·7	334	31	3·9	2·7	20	31	4·4	3·3	27	31	4·0	3·0	5
,, ...	31	5·3	4·2	306	28	4·7	1·5	46	28	4·5	0·8	33	30	4·0	2·7	8	31	5·0	3·9	14	31	4·3	3·2	2
,, ...	30	5·9	4·5	308	28	5·0	0·8	60	25	5·2	0·5	351	26	4·6	3·3	357	31	5·6	3·9	4	30	4·7	3·1	358
,, ...	30	6·4	4·0	312	28	5·1	0·8	197	23	5·5	1·7	277	23	5·6	3·7	335	31	6·4	4·0	355	27	5·4	3·6	347
,, ...	30	6·9	4·0	303	23	6·7	4·7	242	15	7·5	5·9	275	9	5·7	4·3	283	30	7·4	3·6	330	24	6·5	4·2	304
,, ...	29	7·3	5·1	290	20	8·2	6·8	255	12	10·5	9·4	263	3	7·3	6·2	299	28	7·2	4·7	289	24	7·7	6·4	287
,, ...	29	9·6	7·6	282	17	10·1	9·0	242	11	13·3	12·3	249					28	9·0	7·1	280	21	11·4	8·8	295
,, ...	24	13·3	12·4	274	11	18·4	17·6	237	9	20·4	18·5	242					23	14·3	12·4	278	14	15·0	12·5	285
,, ...	13	16·5	15·8	267	7	26·7	26·1	232	6	29·9	28·0	242					17	17·1	16·1	266	7	18·4	16·8	279

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

OCTOBER 1950

STATION	BHUJ												BIKANER								BOMBAY			
Time in I.S.T.	0230				0730				1430				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	0·6	0·5	246	31	0·2	0·1	241	31	1·9	0·6	283	31	1·9	1·2	201	31	1·3	0·7	263	31	0·6	0·5	50
0·15 a.g. ...	31	6·1	5·0	301	31	4·5	3·8	318	31	4·3	0·8	272	31	7·3	4·6	208	31	3·7	3·3	282	31	3·4	2·0	33
0·6 a.s.l. ...	31	5·9	4·5	298	31	5·5	3·7	306	31	3·3	0·7	230	31	6·7	4·0	231	31	3·7	2·6	278	31	5·2	4·0	34
1·0 ,, ...	31	3·8	0·6	280	31	4·0	1·0	256	31	3·3	0·9	243	31	5·2	3·6	259	31	3·8	2·8	287	31	5·3	4·1	50
1·5 ,, ...	31	3·9	1·5	130	30	3·8	1·7	142	31	3·0	0·9	264	31	5·4	4·0	282	31	4·0	2·6	289	29	5·3	4·8	62
2·0 ,, ...	30	4·6	2·5	108	30	4·8	2·1	113	31	3·2	1·0	275	31	6·0	4·6	298	31	3·7	2·3	287	29	4·7	4·0	66
2·5 ,, ...	28	4·6	1·4	88	30	4·7	1·8	84	31	3·2	0·3	22	31	5·9	4·3	312	31	4·4	2·5	287	26	4·6	4·0	77
3·0 ,, ...	26	4·9	1·3	19	30	4·3	1·9	23	31	3·8	0·8	38	31	5·7	3·9	338	31	4·6	2·4	297	18	4·7	4·2	61
4·0 ,, ...	20	5·3	3·8	342	29	5·7	3·3	360	31	5·1	2·1	331	30	6·7	4·9	11	31	5·7	3·7	299	11	4·7	3·5	357
5·0 ,, ...	14	7·3	5·7	317	29	6·6	3·7	315	30	6·6	5·0	322	30	6·6	3·7	320	30	7·9	6·2	300	5	5·8	3·9	34
6·0 ,, ...	7	7·6	4·0	323	28	9·6	7·4	305	29	9·6	7·5	311	27	10·3	8·9	285	30	11·2	9·4	300	2	2·3	2·3	21
7·5 ,, ...	4	9·3	8·1	264	25	14·9	12·3	299	28	14·3	11·9	301	18	17·5	15·7	294	26	18·0	15·9	299	1	1·0	1·0	245
9·0 ,, ...					22	18·0	14·1	294	23	18·1	14·9	300	12	25·5	24·1	303	15	21·7	20·2	296				

STATION	BOMBAY								CALCUTTA								COCHIN (Willingdon Island)			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	0·7	0·7	76	31	4·6	4·0	293	31	1·3	0·5	336	31	1·7	1·0	7	31	1·9	1·2	346	31	0·9	0·5	64
0·15 a.g. ...	31	3·4	2·6	44	31	3·9	3·3	311	31	5·0	1·1	291	27	2·9	1·4	16	31	3·2	1·7	7	27	2·5	0·7	004
0·6 a.s.l. ...	31	4·7	3·6	43	31	3·3	2·3	18	30	5·2	1·1	347	25	4·1	1·2	13	29	3·5	1·1	14	27	3·6	2·9	299
1·0 ,, ...	31	5·3	4·5	56	31	3·9	3·1	54	29	5·0	1·2	11	25	4·4	1·6	5	28	3·8	1·1	35	24	4·3	3·3	301
1·5 ,, ...	31	5·8	5·3	63	30	5·0	4·2	65	27	5·4	2·1	341	25	4·8	1·5	352	26	4·1	0·5	53	20	4·4	2·9	307
2·0 ,, ...	31	5·3	4·7	68	30	5·7	4·8	65	25	5·7	2·1	316	24	5·1	0·8	333	26	4·5	0·1	55	15	6·1	3·5	297
2·5 ,, ...	29	5·2	4·3	66	29	5·6	4·6	63	21	5·1	2·1	292	21	4·4	1·5	260	26	4·3	1·1	253	10	5·3	3·4	294
3·0 ,, ...	29	4·9	3·7	63	28	5·2	4·4	60	18	4·1	1·5	254	21	5·2	2·6	236	25	4·8	2·3	237	7	5·3	4·6	264
4·0 ,, ...	25	5·1	3·5	27	27	4·7	3·3	36					16	6·1	4·6	239	19	5·8	3·3	247				
5·0 ,, ...	24	6·2	3·9	360	24	5·2	3·6	3					13	8·5	7·0	244	15	6·6	4·4	257				
6·0 ,, ...	23	7·3	4·7	342	23	8·0	5·2	344					11	9·9	7·6	231	14	6·8	4·0	254				
7·5 ,, ...	20	8·5	5·9	320	21	8·9	5·7	326					6	10·2	9·5	226	10	8·3	4·9	239				
9·0 ,, ...	17	8·7	6·3	296	16	8·0	4·6	279					3	14·5	13·5	216	6	7·1	6·1	212				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

OCTOBER 1950

STATION	COCHIN (Willingdon Island)								COOCH BEHAR								CUTTACK							
Time in I.S.T.	0730				1430				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·0	0·7	103	31	3·5	3·1	263	31	1·5	1·2	63	31	1·3	0·5	97	31	0·5	0·3	335	31	0·9	0·6	321
·15 a.g. ...	29	2·8	1·6	083	30	4·7	3·9	266	27	4·3	3·0	76		No ascent			30	4·5	2·4	314	31	4·1	3·0	338
·6 a.s.l. ...	29	3·4	2·3	305	30	4·7	3·6	277	23	4·5	3·0	77					29	5·8	2·6	4	31	6·7	4·5	19
·0 ,, ...	27	3·7	2·7	304	28	4·2	2·6	283	22	4·6	2·9	82					28	6·4	3·3	10	31	7·3	5·0	29
·5 ,, ...	23	4·0	2·1	337	27	3·9	1·7	289	19	4·2	3·6	81					27	6·1	3·6	9	27	7·1	5·0	16
·0 ,, ...	22	5·0	2·5	337	24	3·4	1·5	299	19	4·7	3·3	80					23	5·6	2·7	11	24	6·1	3·9	8
·5 ,, ...	21	4·9	2·8	306	22	4·6	2·9	284	19	5·2	2·8	73					19	4·8	1·3	16	23	5·5	1·3	349
·0 ,, ...	18	4·8	3·1	286	20	6·1	4·9	278	19	4·5	1·8	81					16	4·4	2·6	31	23	5·1	1·7	221
·0 ,, ...	12	4·6	2·6	263	19	5·7	3·8	280	17	5·4	3·3	240					8	4·6	1·0	146	17	4·9	3·3	220
·0 ,, ...	9	3·9	0·9	204	18	5·2	1·7	291	12	9·3	8·3	252									16	5·3	3·9	208
·0 ,, ...	8	5·0	1·6	112	14	4·6	0·9	291	9	12·4	11·3	250									12	5·1	2·9	226
·5 ,, ...	8	5·0	2·1	105	9	5·0	1·5	092	4	16·5	16·5	245									8	7·6	3·1	213
·0 ,, ...	5	5·8	5·2	124	6	6·9	6·0	103	1	4·0	4·0	240									7	10·3	2·9	204

STATION	CUTTACK				DEOLALI				DIBRUGARH								GADAG							
Time in I.S.T.	1430				0730				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·6	1·0	2		CALM			31	1·5	0·9	55	31	1·9	0·9	49	31	1·2	0·6	253	31	0·7	9·2	261
·15 a.g ...	30	4·7	3·1	17	26	2·9	1·9	88	24	2·4	1·9	56	29	2·1	0·9	53	31	5·3	0·8	29	30	4·2	1·0	031
·6 a.s.l. ...	29	5·1	3·6	30	26	1·4	0·8	85	24	2·9	2·1	44	29	2·2	0·8	80								
·0 ,, ...	27	5·7	4·1	29	26	5·5	4·6	73	24	3·4	1·9	51	28	3·0	0·7	48	31	5·7	2·8	53	30	5·1	3·4	064
·5 ,, ...	23	6·1	4·3	20	26	6·4	5·8	72	23	3·5	1·5	78	27	2·9	0·5	193	30	5·5	4·8	62	23	6·3	5·4	065
·0 ,, ...	22	5·5	3·4	3	25	5·7	5·1	71	23	3·3	0·5	153	26	2·7	1·5	216	28	5·8	5·0	59	29	7·3	6·1	063
·5 ,, ...	20	5·1	2·9	338	25	5·4	4·4	64	21	3·1	1·3	209	24	3·2	1·9	213	26	6·0	5·3	52	29	7·0	5·8	054
·0 ,, ...	19	4·8	1·7	299	25	5·5	4·1	58	19	3·7	2·6	218	23	4·2	3·3	240	25	5·2	4·1	58	29	6·0	4·3	060
·0 ,, ...	19	5·1	1·8	252	22	5·4	3·7	23	11	7·1	6·5	223	19	6·0	5·4	243	21	4·4	2·2	33	29	4·9	3·0	061
·0 ,, ...	14	4·4	1·9	234	21	6·6	4·8	348	9	10·3	9·8	236	15	7·9	7·6	239	17	5·7	3·8	31	27	5·4	3·4	051
·0 ,, ...	11	5·3	2·9	245	20	9·2	6·0	339	6	13·7	13·3	242	11	13·1	12·5	245	9	5·3	3·7	59	24	5·7	3·3	043
·5 ,, ...	9	7·4	3·9	245	19	10·6	7·2	323	4	14·7	14·6	247	9	15·4	14·7	247					19	5·2	2·2	044
·0 ,, ...	8	9·8	6·2	234	18	10·2	8·6	296	2	22·7	22·7	237	7	16·3	16·1	243					15	5·8	0·2	154

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

OCTOBER 1950

STATION	GADAG				GAYA												GOPALPUR							
Time in I.S.T.	1430				0230				0730				1430				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·6	1·7	43	31	1·5	1·0	173	31	1·8	1·4	195	31	2·7	1·4	311	31	3·5	3·3	336	31	3·5	1·9	83
0·15 a.g. ...	29	4·6	3·2	46	31	3·9	1·5	239	31	3·2	1·8	233	31	4·5	2·5	330	29	5·5	4·7	341	30	4·7	2·5	57
0·6 a.s.l. ...					31	4·4	2·0	325	31	4·1	2·0	332	31	3·8	2·5	322	28	6·1	4·1	17	30	4·8	3·6	27
1·0 ,, ...	29	5·1	3·6	43	31	4·6	3·3	336	30	4·7	2·8	341	31	4·0	2·5	321	27	5·9	4·3	24	28	5·6	4·3	20
1·5 ,, ...	28	4·7	3·6	53	31	4·8	3·5	333	30	5·1	3·3	338	31	4·3	2·4	316	24	6·4	4·6	29	28	6·2	4·7	17
2·0 ,, ...	28	5·1	4·0	58	30	4·9	2·9	322	30	5·0	2·8	331	31	4·4	1·7	302	23	5·9	3·9	27	27	6·1	3·5	15
2·5 ,, ...	25	4·9	4·1	53	23	4·6	1·3	311	30	4·9	2·0	326	31	5·1	1·5	292	21	5·7	1·9	23	26	4·9	1·8	359
3·0 ,, ...	24	4·8	3·7	50	18	5·3	1·4	245	30	5·6	1·8	259	29	5·1	2·4	287	19	5·1	0·6	82	23	5·2	1·0	328
4·0 ,, ...	16	4·5	3·1	18	4	4·6	4·0	216	25	6·2	4·1	235	25	6·5	4·8	271	14	4·4	1·3	322	17	4·9	1·4	245
5·0 ,, ...	15	5·6	4·2	13					20	7·4	6·2	236	21	7·8	6·6	253	10	4·1	3·2	204	13	3·6	1·5	196
6·0 ,, ...	15	5·3	3·5	31					18	11·2	9·9	234	21	9·9	8·7	248	6	5·4	3·8	191	13	3·9	1·4	198
7·5 ,, ...	15	5·7	2·5	9					14	17·7	17·1	228	20	16·2	15·0	240	4	9·7	8·1	208	9	4·2	1·1	247
9·0 ,, ...	12	5·3	2·7	232					10	29·9	29·4	227	14	16·7	16·0	239	4	14·1	12·5	197	7	8·2	3·8	223

STATION	GORAKHPUR								HYDERABAD (Dn.)												JAGDALPUR			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·1	0·6	338	31	2·0	1·0	265	31	0·7	0·4	48	31	1·2	0·5	39	31	3·6	2·9	54	31	0·5	0·3	287
0·15 a.g. ...	30	3·3	0·7	308	31	3·1	1·7	290	31	5·6	4·3	76	31	5·4	3·2	59	31	5·5	4·6	51	31	4·0	2·9	030
0·6 a.s.l. ...	27	4·3	2·6	291	31	3·6	2·1	291	31	3·5	2·6	63	31	3·2	1·6	46	31	5·1	4·2	52	30	2·9	2·0	028
1·0 ,, ...	27	4·9	2·9	306	31	3·9	2·2	299	31	7·3	5·9	69	31	7·0	5·3	63	31	5·5	4·6	49	30	5·6	3·8	044
1·5 ,, ...	28	4·6	2·0	314	31	4·1	1·8	294	30	7·5	6·4	46	31	8·1	7·2	49	31	6·0	4·9	43	28	5·8	4·4	035
2·0 ,, ...	29	4·5	1·1	4	31	4·6	1·7	283	30	7·9	6·9	35	31	8·1	7·4	40	31	5·9	4·9	46	28	6·0	4·2	037
2·5 ,, ...	30	5·2	0·3	35	31	4·8	1·0	293	28	7·3	6·1	31	31	7·2	6·5	38	30	6·5	5·4	47	27	5·4	3·1	030
3·0 ,, ...	30	5·7	0·2	286	31	5·6	0·8	291	27	5·8	3·6	37	31	5·8	4·7	44	29	5·8	3·4	50	25	5·0	1·9	030
4·0 ,, ...	28	5·6	2·6	247	30	6·1	2·0	266	11	5·1	2·9	76	27	5·4	2·4	68	16	4·7	1·8	30	14	5·3	0·9	157
5·0 ,, ...	24	7·8	6·6	252	30	6·9	5·6	260	1	5·0	5·0	75	26	5·3	1·3	75	14	5·2	2·4	314	4	12·1	5·0	040
6·0 ,, ...	24	11·3	10·3	250	28	10·4	9·5	256					25	5·8	2·0	168	14	6·4	2·6	316	3	29·0	26·2	034
7·5 ,, ...	17	16·8	16·8	239	22	17·7	17·0	254					22	6·7	0·9	245	13	8·2	2·6	385				
9·0 ,, ...	14	25·0	24·4	236	15	26·1	24·9	245					16	8·8	5·4	220	13	9·5	4·3	224				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

OCTOBER 1950

STATION	JAGDALPUR								JAMSHEDPUR								JHARSUGUDA							
Time in I.S.T.	0730				1430				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	0·6	0·5	26	31	2·0	1·7	28	31	1·6	1·0	281	31	2·0	0·7	8	31	0·8	0·7	13	31	0·6	0·6	11
0·15 a. g. ...	30	3·4	2·5	23	31	4·5	3·9	28	31	2·5	1·4	290	31	3·8	1·3	15	31	4·5	3·9	15	31	4·0	3·5	24
0·6 a.s.l. ...	30	2·2	1·6	19	31	3·5	3·0	29	31	4·2	2·3	360	31	3·4	2·0	9	31	4·9	3·0	21	31	5·4	4·1	30
1·0 ,, ...	30	4·0	4·5	34	31	5·1	4·3	26	30	5·8	3·5	10	31	4·6	2·7	7	31	5·4	2·9	18	30	6·3	4·8	24
1·5 ,, ...	30	6·9	5·8	35	30	5·3	4·3	30	29	6·1	4·0	5	31	4·9	3·0	2	31	5·5	3·5	13	30	6·7	5·1	25
2·0 ,, ...	30	6·5	5·1	40	30	5·5	4·4	36	28	5·4	2·9	356	30	5·1	2·8	343	27	5·9	3·7	9	29	6·4	4·3	17
2·5 ,, ...	30	5·3	3·3	31	29	5·5	3·6	36	28	5·1	1·4	338	27	4·8	2·4	317	25	5·6	2·5	8	29	6·2	3·0	5
3·0 ,, ...	29	5·1	2·6	44	25	4·4	1·3	32	26	5·6	1·7	334	26	5·2	2·4	298	19	5·0	1·4	311	27	5·6	1·3	321
4·0 ,, ...	27	4·9	1·4	167	21	4·8	1·3	172	21	5·7	3·3	245	21	5·9	3·9	264	5	5·3	1·2	166	23	6·3	3·4	326
5·0 ,, ...	23	5·4	2·3	189	18	6·2	2·2	213	17	8·6	6·8	234	17	7·4	5·0	246					23	7·2	4·2	322
6·0 ,, ...	20	6·2	3·4	198	17	5·5	2·2	241	14	8·4	6·7	225	12	7·1	4·8	250					20	8·9	6·7	324
7·5 ,, ...	19	7·3	4·4	226	14	8·5	5·0	221	4	13·6	13·3	232	8	11·2	10·0	233					13	12·5	11·3	225
9·0 ,, ...	18	10·2	6·2	206	13	9·5	6·8	205	3	22·7	22·2	222	5	14·6	14·3	219					9	20·4	19·0	224

STATION	JHARSUGUDA				JODHPUR												JABALPUR							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·1	0·7	19	31	1·0	0·4	272	31	1·0	0·2	320	31	2·0	0·5	275	31	0·8	0·7	152	31	0·8	0·5	169
0·15 a. g. ...	31	3·6	2·5	19	30	6·7	4·4	231	31	4·4	2·3	260	31	3·7	0·9	275	30	2·9	0·9	124	30	2·8	1·4	194
0·6 a.s.l. ...	31	3·7	2·6	22	30	6·9	4·6	235	31	6·1	3·7	258	31	3·7	1·3	267	30	2·9	0·6	74	30	3·2	1·0	186
1·0 ,, ...	31	4·4	3·0	19	31	5·4	3·2	238	31	5·2	3·3	253	31	4·0	1·7	281	30	3·7	2·6	20	30	4·1	2·7	20
1·5 ,, ...	30	4·6	3·5	14	30	4·2	1·8	261	31	4·9	1·9	262	31	4·0	1·5	295	30	4·4	3·7	9	30	5·1	4·5	13
2·0 ,, ...	28	5·2	3·8	10	30	4·0	1·5	287	30	4·3	1·3	331	31	4·1	1·3	326	29	5·0	3·8	351	30	5·7	5·0	5
2·5 ,, ...	27	5·7	3·4	360	30	4·1	2·1	320	30	5·1	1·7	354	31	4·3	1·5	343	27	5·5	3·8	330	30	5·9	4·3	358
3·0 ,, ...	21	6·0	3·8	324	28	4·4	2·6	331	30	5·2	2·7	25	30	4·1	1·4	4	25	5·3	3·6	324	29	5·6	3·7	340
4·0 ,, ...	18	6·2	4·3	262	3	6·5	3·1	14	30	6·4	4·4	27	30	4·3	2·2	332	6	3·3	1·0	216	26	4·7	2·5	310
5·0 ,, ...	16	7·4	5·7	248	2	8·3	7·6	29	27	6·7	3·9	333	30	7·3	5·2	296	2	3·7	3·5	249	25	6·2	4·8	273
6·0 ,, ...	15	8·9	7·7	235					26	11·0	8·6	306	39	10·0	8·2	302					23	9·3	7·9	268
7·5 ,, ...	10	12·0	11·2	235					16	17·5	15·7	301	24	19·1	13·1	299					20	12·9	12·1	261
9·0 ,, ...	9	17·7	17·4	228					11	26·5	25·6	313	20	21·2	19·0	292					18	16·9	15·3	248

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

OCTOBER 1950

STATION	JABALPUR				MADHOSAGAR												MADRAS							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·2	0·9	24	31	1·6	1·4	227	31	1·4	1·2	224	31	2·4	2·2	311	31	2·3	1·8	292	31	2·3	1·9	277
0·15 a.g. ...	31	2·9	1·9	15	31	4·1	0·9	261	31	4·5	2·5	255	31	4·2	3·8	316	30	4·3	1·1	268	30	5·3	3·3	285
0·6 a.s.l. ...	31	3·0	2·2	12	31	4·1	0·8	330	31	4·4	2·1	294	31	3·9	3·4	321	30	4·9	1·3	313	30	5·3	2·6	314
1·0 ,, ...	31	3·1	2·6	9	31	3·9	2·3	318	31	4·2	2·7	317	31	4·2	3·7	319	29	4·7	1·9	346	30	5·3	2·8	344
1·5 ,, ...	31	3·5	3·0	3	31	4·7	4·0	326	31	4·9	4·1	322	31	4·3	3·9	320	29	5·1	3·3	343	30	5·0	3·3	1
2·0 ,, ...	31	4·7	3·6	355	31	5·7	4·9	323	31	5·8	4·8	324	31	4·9	4·3	327	29	5·1	3·2	341	29	4·7	2·7	1
2·5 ,, ...	31	5·6	4·1	343	29	6·1	5·1	326	31	6·7	5·5	335	31	5·1	4·1	328	28	4·7	2·5	338	28	4·5	1·3	8
3·0 ,, ...	30	5·8	3·7	328	28	6·4	4·6	330	31	7·1	5·8	341	31	5·3	4·0	326	20	5·3	1·4	350	27	5·1	0·5	258
4·0 ,, ...	29	5·6	4·4	289	11	7·1	5·1	329	31	6·6	3·6	326	31	6·5	4·8	300	9	4·3	1·8	132	26	5·0	1·2	200
5·0 ,, ...	27	7·3	6·3	271	6	9·4	6·7	271	31	7·7	4·9	284	30	8·1	6·6	284					26	5·4	1·9	129
6·0 ,, ...	27	9·5	8·4	269	1	6·5	6·5	280	31	14·2	8·7	271	29	11·8	10·1	281					25	5·5	1·8	114
7·5 ,, ...	26	13·9	12·6	263	1	8·0	8·0	275	27	15·5	14·1	270	27	17·3	15·6	270					18	4·9	2·9	111
9·0 ,, ...	24	17·2	15·5	257					23	19·1	18·0	263	22	20·7	19·0	260					11	6·7	5·7	132

STATION	MADRAS				MALEGAON												MANGALORE							
Time in I.S.T.	1430				0230				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	4·1	1·7	38	31	2·3	1·9	292	31	2·4	1·9	278	31	2·8	2·1	22	31	2·1	1·5	84	31	2·3	1·9	93
0·15 a.g. ...	31	5·1	2·3	44	31	4·3	2·5	13	31	3·4	1·7	13	31	4·0	3·5	29	26	3·8	0·7	55	31	3·8	2·5	72
0·6 a.s.l. ...	31	4·9	2·6	2	31	4·3	2·5	13	31	3·4	1·7	13	31	4·0	3·5	29	26	3·9	0·8	314	30	4·2	0·8	10
1·0 ,, ...	30	4·6	2·7	345	31	6·7	5·1	49	31	5·0	3·7	62	31	4·1	3·8	39	24	3·8	0·5	68	29	4·7	1·4	30
1·5 ,, ...	30	4·9	2·9	331	31	6·7	5·7	56	30	6·1	5·3	63	30	4·0	3·5	38	23	4·4	1·9	78	26	5·0	3·0	63
2·0 ,, ...	29	4·8	2·7	316	31	5·9	5·1	57	30	5·3	4·8	59	30	4·4	3·4	47	19	4·5	3·6	73	25	5·4	3·3	56
2·5 ,, ...	29	4·7	2·5	301	31	5·3	4·4	61	30	5·4	4·5	51	29	4·4	3·0	41	14	4·2	2·8	53	24	5·1	2·7	61
3·0 ,, ...	27	5·3	1·4	305	31	5·4	3·4	53	28	6·4	5·0	43	26	4·2	3·1	42	10	4·1	1·7	71	23	4·8	2·7	69
4·0 ,, ...	22	5·7	0·4	249	25	6·1	3·3	31	25	5·9	3·5	13	25	4·4	1·9	349	2	5·3	2·1	318	18	4·2	1·9	32
5·0 ,, ...	20	5·1	1·7	112					23	6·6	4·7	313	22	5·8	3·2	326	1	7·5	7·5	60	15	6·3	3·1	30
6·0 ,, ...	19	5·6	1·6	79					23	7·5	5·2	319	20	9·4	6·9	318					14	6·1	3·5	44
7·5 ,, ...	17	4·7	2·8	89					22	9·8	8·0	311	17	11·3	8·6	301					8	5·6	3·8	26
9·0 ,, ...	13	6·5	4·7	100					20	10·8	8·5	284	17	11·5	9·2	276					7	3·9	0·5	265

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

OCTOBER 1950

ATION	MANGALORE				MASULIPATAM												NAGERCOIL							
e in I.S.T.	1430				0230				0730				1430				0230				0730			
t in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ce ...	31	2·9	2·1	251	31	1·7	0·9	347	31	1·4	0·9	349	31	2·2	1·3	35	31	3·3	3·0	288	31	2·2	2·0	289
a.g. ...	31	4·6	3·9	253	29	4·0	0·6	7	30	4·2	2·5	6	30	4·0	2·2	44	30	8·1	7·9	298	31	5·9	5·7	298
s.l. ...	31	4·1	1·5	263	29	4·3	1·3	39	30	5·4	3·3	35	30	4·3	2·9	32	30	9·2	8·9	299	31	8·6	8·3	297
,, ...	28	3·9	0·3	108	29	4·2	2·4	25	30	5·3	3·4	39	29	4·6	3·3	30	30	6·9	6·5	292	31	7·8	7·1	289
,, ...	27	4·3	3·1	46	29	4·2	2·5	37	30	5·2	3·3	46	29	4·8	3·6	26	30	6·3	5·7	288	30	0·7	5·5	289
,, ...	26	4·8	3·2	74	29	4·4	2·4	39	29	4·7	3·1	53	29	5·0	3·4	28	28	7·1	6·1	286	29	6·2	4·9	289
,, ...	24	4·1	2·0	64	25	3·8	1·4	63	29	5·0	3·0	58	29	5·1	2·9	32	22	6·6	5·1	288	28	6·5	5·2	289
,, ...	24	4·1	1·2	51	22	4·4	1·0	133	26	5·3	2·7	69	26	4·9	1·8	33	19	5·7	4·1	280	28	6·8	4·9	278
,, ...	24	4·0	1·4	30	17	5·0	2·1	127	23	5·8	2·3	105	22	5·3	1·4	128	2	8·3	3·6	255	25	6·3	4·3	278
,, ...	18	5·5	2·3	65					23	5·3	2·7	121	20	5·1	1·5	177	1	5·5	5·5	255	23	6·8	4·3	264
,, ...	16	6·2	3·3	59					21	5·7	2·2	113	19	5·5	0·6	146	1	6·0	6·0	240	19	6·4	1·9	296
,, ...	13	5·3	2·3	51					19	6·2	0·7	110	16	6·3	2·0	133					13	6·9	2·6	291
,, ...	12	3·9	1·5	102					16	7·9	2·2	94	15	8·3	4·4	148					9	5·9	4·5	97

ATION	NAGERCOIL				NAGPUR												NEW DELHI							
e in I.S.T.	1430				0230				0730				1430				0230				0730			
ht in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ce ...	31	4·5	4·3	267	31	1·8	1·5	343	31	1·0	0·9	360	31	2·4	2·2	45	31	0·9	0·8	285	31	1·3	1·1	270
a.g. ...	29	8·7	8·5	267	30	4·1	2·7	30	31	4·0	3·6	23	31	4·0	3·5	45	31	3·8	2·2	351	31	4·1	2·1	282
s.l. ...	29	9·4	9·2	282	30	4·1	2·8	58	31	4·5	3·8	49	31	4·1	3·6	41	31	3·7	2·5	335	31	4·5	3·2	294
,, ...	29	8·7	8·2	292	30	4·8	4·1	57	31	4·7	4·0	56	31	4·2	3·7	36	31	4·9	4·0	318	31	5·2	4·2	301
,, ...	29	8·1	7·2	292	30	5·6	4·7	47	31	6·1	5·3	44	31	4·5	3·8	30	31	6·5	6·0	304	31	6·3	5·6	307
,, ...	28	7·9	6·9	286	30	5·9	5·0	32	31	6·5	5·6	37	31	4·8	3·4	18	29	7·1	6·3	303	31	7·1	6·3	311
,, ...	27	8·1	7·1	283	30	6·3	4·8	19	30	6·8	5·3	25	30	6·3	4·2	9	25	7·3	5·7	310	31	7·2	5·9	320
,, ...	26	9·0	7·7	276	26	6·5	4·2	11	30	7·2	5·1	14	30	5·8	3·2	357	24	8·2	6·9	308	31	7·4	5·3	328
,, ...	19	7·4	4·9	280	10	4·8	1·5	347	27	6·0	2·0	5	30	5·5	2·3	300	3	5·2	3·2	279	31	7·0	5·2	325
,, ...	16	7·0	5·5	270	3	4·5	3·0	305	26	5·2	1·7	332	26	5·9	2·9	279	1	9·5	9·5	245	31	7·7	6·0	288
,, ...	15	5·8	3·2	278	2	5·7	5·1	250	25	6·3	3·1	274	25	6·7	3·9	278					31	10·8	9·1	279
,, ...	8	4·1	2·4	301					24	10·3	6·8	268	22	8·6	6·5	264					28	17·6	15·3	271
,, ...	8	7·2	6·5	90					21	13·1	8·8	242	21	11·6	10·7	238					24	21·7	20·4	268

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

OCTOBER 1950

STATION	NEW DELHI				POONA												PORT BLAIR						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	3·0	2·6	304	31	0·9	0·7	243	31	0·4	0·4	257	31	2·2	1·9	92	31	1·6	1·0	237	31	1·2	0·6
0·15 a. g. ...	31	3·8	2·9	317	31	2·5	0·4	335	31	1·9	0·4	105	31	3·5	2·5	70	31	4·5	2·6	221	31	4·1	2·1
0·6 a.s.l. ...	31	4·1	3·3	311	31	2·2	1·3	223	31	1·6	0·8	222	31	2·9	2·2	64	30	5·6	3·5	230	30	5·4	2·8
1·0 ,, ...	31	4·4	3·8	310	31	5·0	3·7	49	31	5·3	4·4	65	31	3·7	3·0	55	29	5·0	2·9	230	27	4·8	2·1
1·5 ,, ...	31	5·7	5·0	305	31	6·8	6·4	70	31	6·6	6·0	74	31	4·1	3·7	59	28	4·8	2·6	217	26	4·4	2·0
2·0 ,, ...	31	7·1	6·0	307	31	6·2	5·9	71	31	6·4	5·9	73	29	4·7	4·0	61	26	4·9	2·1	215	25	5·0	1·9
2·5 ,, ...	31	7·1	5·7	311	25	5·3	4·5	82	30	6·0	5·2	67	29	5·3	4·6	61	22	5·4	1·5	203	23	5·3	1·3
3·0 ,, ...	31	6·9	5·0	306	21	4·9	3·9	78	30	5·9	4·8	65	25	5·6	5·0	58	18	5·2	0·9	131	23	4·9	0·5
4·0 ,, ...	30	7·4	5·7	299	6	4·2	2·4	44	22	4·7	4·1	22	23	4·9	3·8	35	5	5·4	1·3	104	18	5·0	0·8
5·0 ,, ...	31	7·7	6·3	292					21	6·7	5·0	8	21	6·0	3·8	3					13	5·7	2·1
6·0 ,, ...	31	10·9	9·5	284					19	8·0	5·8	350	17	9·0	6·2	350					10	5·3	3·6
7·5 ,, ...	28	16·3	14·7	272					16	7·1	5·4	331	16	8·6	6·5	326					8	6·5	5·9
9·0 ,, ...	21	23·8	22·2	265					13	9·1	6·3	283	14	8·6	6·6	291					4	7·3	7·1

STATION	PORT BLAIR				RAIPUR												TEZPUR						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	2·4	1·2	231	31	1·0	0·7	344	31	0·8	0·6	10	31	1·9	1·7	30	31	1·1	0·7	58	31	1·0	0·5
0·15 a. g. ...	30	4·9	2·7	215	31	4·1	2·4	10	30	4·3	3·6	27	29	3·9	3·6	26	23	3·8	2·3	73	26	3·2	2·0
0·6 a.s.l. ...	30	5·6	2·9	230	31	4·2	2·5	30	31	4·7	3·6	38	29	4·0	3·6	29	23	4·0	1·2	105	25	4·9	2·5
1·0 ,, ...	28	5·7	2·8	232	31	5·0	3·6	31	31	5·7	4·7	38	30	4·4	3·7	34	22	3·5	1·0	98	24	5·1	2·7
1·5 ,, ...	25	5·5	2·4	212	31	6·0	4·5	26	31	6·3	5·6	33	30	5·2	4·2	27	21	3·8	0·4	86	23	4·7	2·0
2·0 ,, ...	22	5·2	1·8	206	30	6·3	4·6	18	31	7·0	5·7	29	30	6·0	4·5	20	16	3·6	0·2	90	19	4·4	0·8
2·5 ,, ...	18	4·9	1·4	174	28	6·5	4·2	14	30	7·7	5·5	20	29	6·4	4·4	15	14	3·1	0·5	225	18	3·9	1·1
3·0 ,, ...	19	4·9	1·6	162	27	5·2	2·8	7	29	7·4	4·1	10	25	6·2	3·3	344	12	4·2	2·5	239	15	5·0	2·7
4·0 ,, ...	16	5·4	0·6	162	6	4·6	1·1	223	28	5·6	2·1	250	25	5·7	2·2	263	9	7·2	6·4	239	11	6·3	5·7
5·0 ,, ...	12	5·3	0·8	191	5	3·8	1·4	150	28	6·1	3·5	238	21	6·3	3·9	261					8	9·9	9·6
6·0 ,, ...	12	6·5	2·2	98	4	5·3	2·1	185	24	7·3	4·7	239	21	7·7	5·6	251					7	12·3	11·7
7·5 ,, ...	9	8·1	5·8	87	1	5·0	5·0	55	20	11·4	8·3	227	18	10·6	8·3	241					5	14·0	13·5
9·0 ,, ...	8	8·0	7·2	107					19	15·1	12·7	221	17	13·5	11·8	226					5	17·9	17·6

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

OCTOBER 1950

STATION	TEZPUR				TIRUCHIRAPALLI												TRIVANDRUM				UDAIPUR			
Time in I.S.T.	1430				0230				0730				1430				0730				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	0·8	0·2	97	31	1·2	1·0	287	31	1·8	1·6	286	31	1·2	0·9	295	31	1·2	0·9	356	31	0·5	0·4	291
0·15 a.g. ...	31	2·9	0·9	87	30	5·1	3·4	285	30	5·0	4·5	283	31	2·7	1·9	282	30	3·9	3·5	341	31	2·3	1·1	306
0·6 a.s l. ...	31	3·8	1·7	94	30	5·7	3·1	283	30	5·7	4·6	292	31	2·8	1·6	292	30	5·7	5·3	313				
1·0 ,, ...	29	3·7	1·2	121	30	4·5	2·2	303	30	4·5	2·7	306	31	3·5	1·9	298	29	6·2	5·6	308	31	3·0	0·6	330
1·5 ,, ...	29	4·1	1·3	180	29	4·3	2·9	328	30	4·1	2·3	334	31	4·5	2·6	303	26	5·7	4·7	302	31	3·2	1·5	36
2·0 ,, ...	28	4·0	2·0	237	26	4·7	3·0	332	29	4·5	2·5	332	31	5·3	3·0	303	23	5·5	4·5	304	31	4·4	2·3	34
2·5 ,, ...	27	4·2	2·8	241	23	4·9	2·5	307	28	4·9	2·3	312	28	6·2	3·0	285	23	6·0	4·9	299	31	5·3	2·8	29
3·0 ,, ...	25	5·0	4·0	245	22	5·4	2·1	298	28	5·1	2·6	285	27	6·0	3·3	274	21	6·4	5·5	284	31	5·2	2·9	40
4·0 ,, ...	19	7·0	6·7	261	3	2·2	0·6	102	27	4·8	2·2	267	25	5·3	2·3	265	17	5·9	4·5	266	7	4·7	2·7	323
5·0 ,, ...	18	9·2	8·8	260					26	5·1	0·6	137	25	4·9	0·5	236	13	4·7	2·1	302	5	11·2	10·6	330
6·0 ,, ...	16	11·9	11·2	254					23	5·0	1·6	97	24	5·2	0·6	093	10	4·3	0·0	206	2	16·0	16·2	319
7·5 ,, ...	13	15·5	14·5	248					15	5·6	3·3	93	17	4·9	1·8	076	8	5·4	1·5	49				
9·0 ,, ...	13	17·9	17·1	246					8	4·7	4·2	96	10	5·9	5·3	095	6	8·7	8·5	120				

STATION	UDAIPUR								VENGURLA												VERAVAL			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	0·3	0·3	310	31	1·3	0·6	267	31	1·1	0·6	29	31	0·6	0·4	41	31	3·3	2·7	249	31	3·3	3·1	349
0·15 a.g. ...	31	2·5	1·4	317	29	3·0	0·8	326	29	3·4	2·2	28	30	2·6	1·5	71	30	3·8	2·8	259	31	6·6	6·1	343
0·6 a.s.l. ...									29	4·9	3·4	19	30	4·6	2·7	71	30	3·3	0·8	336	31	5·6	4·1	351
1·0 ,, ...	31	3·9	0·6	336	29	3·0	0·8	328	29	5·4	3·6	44	30	5·8	4·5	70	30	3·9	2·2	48	31	4·8	2·6	18
1·5 ,, ...	31	3·6	1·1	44	31	2·6	0·9	340	29	5·5	4·7	65	30	6·2	5·5	74	28	5·0	4·1	63	31	5·2	3·7	64
2·0 ,, ...	31	4·1	2·0	42	31	3·0	1·1	360	28	6·2	5·8	70	29	6·2	5·4	70	28	5·7	4·7	65	31	5·3	3·8	74
2·5 ,, ...	31	4·5	2·5	42	31	3·3	2·1	8	27	6·0	4·6	75	29	6·2	5·2	70	27	6·6	4·9	64	29	5·0	3·0	84
3·0 ,, ...	31	5·3	2·9	47	31	3·4	1·7	15	23	5·4	4·1	74	27	6·4	4·6	71	27	6·1	4·2	62	26	5·0	1·8	87
4·0 ,, ...	31	5·0	2·1	13	31	5·3	2·8	319	14	5·4	2·9	55	23	5·2	3·3	49	25	4·7	2·4	42	14	2·7	0·6	9
5·0 ,, ...	30	7·1	4·0	253	31	8·2	6·2	293	3	7·3	4·3	71	20	5·7	4·1	30	25	5·0	2·6	32				
6·0 ,, ...	29	10·7	0·4	203	30	11·9	9·4	292	1	3·0	3·1	125	19	7·6	5·8	30	24	6·2	3·5	27				
7·5 ,, ...	25	17·4	1·5	209	29	16·7	13·8	288					17	7·7	5·8	19	22	6·3	3·3	18				
9·0 ,, ...	12	23·6	20·5	304	23	21·1	18·1	286					15	6·2	1·1	15	19	5·6	0·6	296				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

OCTOBER 1950

STATION	VERAVAL								VISAKHAPATNAM											
Time in I.S.T.	0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·6	1·5	011	31	5·0	4·2	276	31	0·9	0·5	300	31	1·2	0·8	02	31	3·6	2·5	95
0·15 a. g. ...	31	7·2	6·6	007	31	6·0	4·7	264	29	2·8	1·3	338	31	3·2	2·2	355	30	4·9	3·2	100
0·6 a.s.l. ...	31	5·0	4·1	020	31	3·7	1·0	295	29	4·7	2·1	35	30	5·6	4·0	33	29	4·5	2·7	59
1·0 ,, ...	31	4·2	3·0	051	31	3·3	1·6	14	29	5·5	4·0	48	30	6·4	5·1	42	28	5·2	3·5	32
1·5 ,, ...	31	4·4	2·8	076	31	4·1	3·0	47	28	5·1	3·7	46	30	5·9	4·7	47	25	6·2	5·3	28
2·0 ,, ...	31	5·0	3·4	085	31	4·6	3·5	46	26	4·4	2·5	57	27	5·5	3·9	38	24	5·7	4·3	23
2·5 ,, ...	30	5·0	3·2	090	31	5·0	3·2	44	14	4·2	1·4	74	27	4·9	2·3	31	22	5·5	2·6	18
3·0 ,, ...	30	4·1	2·2	048	31	5·4	2·8	32	12	4·5	2·0	97	22	4·6	1·7	42	20	4·9	1·8	52
4·0 ,, ...	30	5·1	2·3	007	31	5·0	2·4	10	3	6·0	3·3	263	21	4·4	1·5	120	16	4·8	1·0	179
5·0 ,, ...	29	6·5	4·0	335	31	5·4	2·5	322					19	4·6	2·4	131	13	5·4	2·7	191
6·0 ,, ...	26	8·7	6·1	317	30	8·0	4·9	310					13	5·0	2·3	177	13	6·0	3·3	187
7·5 ,, ...	23	10·7	7·6	323	29	10·1	7·0	305					6	9·0	8·9	219	10	6·4	3.5	183
9·0 ,, ...	21	12·1	8·5	312	25	11·2	8·2	305					6	11·3	10·2	205	7	8·6	5·4	181

STATION																				
Time in I.S.T.																				
Height in Km.																				
Surface ...																				
0·15 a. g. ...																				
0·6 a.s.l. ...																				
1·0 ,, ...																				
1·5 ,, ...																				
2·0 ,, ...																				
2·5 ,, ...																				
3·0 ,, ...																				
4·0 ,, ...																				
5·0 ,, ...																				
6·0 ,, ...																				
7·5 ,, ...																				
9·0 ,, ...																				

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

OCTOBER 1950

Height in Km.	n	V	v	D
	AHMEDABAD			
10	42	17·6	15·0	279
11	37	18·4	14·7	274
12	30	18·0	15·4	272
13	24	18·1	16·1	273
14	22	16·7	14·5	270
15	15	15·7	14·3	263
16	13	14·7	13·9	271
17	11	9·3	6·2	289
18	9	10·2	5·1	276
19	8	10·1	4·2	289
20	6	9·3	1·6	13
21	5	6·0	2·8	43
22	5	8·3	3·7	321
23	4	9·7	5·9	311
24	3	10·7	4·5	300
25	2	11·0	1·7	312
26	1	7·0	7·0	080
27	1	6·5	6 5	050
28	1	3·0	3·0	295
29	1	3·5	3·5	325
	ALLAHABAD			
10	39	26·0	24·9	237
11	33	28·4	27·2	231
12	31	28·6	27·4	230
13	28	29·2	27·9	234
14	21	25·7	25·2	236
15	15	21·7	20·8	223
16	12	15·8	14·6	224
7	10	12·5	11·6	221
18	6	12·8	10·8	216
19	5	12·6	7·6	242
20	3	14·0	8·5	221
21	1	13·0	13·0	220
	AMBALA			
10	21	20·5	19·0	290
11	19	22·0	20·3	288
12	17	24·9	22·1	282
13	13	27·7	25·9	279
14	10	25·9	23·1	285
15	10	23·4	21·9	278
16	8	22·1	20·4	272
17	7	21·7	20·0	272
18	7	20·3	5·3	295
19	6	14·6	12·8	183
20	4	14·8	13·7	258
21	2	20·5	17·9	282
22	2	22·3	18·3	275
23	1	22·0	22·0	340
24	1	14·0	14·0	240
25	1	13·5	13·5	220
26	1	12·5	12·5	230
27	1	10·0	10·0	219
28	1	14·0	14·0	215
	ANANTAPUR			
10	25	5·6	2·9	169
11	20	8·1	5·9	153
12	19	12·1	10·4	145
13	16	12·0	10·5	140
14	15	8·8	7·6	118
15	13	8·1	7·2	102
16	9	7·6	7·2	99
17	7	7·9	7·7	90
18	4	7·9	7·8	93
19	1	7·0	7·0	90
20	1	5·5	5·5	90
21	1	10·0	10·0	90
22	1	8·0	8·0	70
23	1	11·5	11·5	70
24	1	11·5	11·5	100
25	1	17·0	17·0	80
26	1	14·5	14·5	90
27	1	23·5	23·5	80
28	1	14·0	14·0	100
29	1	20·0	20·0	95
	ASANSOL			
10	6	16·4	14·6	230
11	4	21·8	19·3	238
12	1	3·0	3·0	280
13	1	4·0	4·0	265
	BANGALORE			
10	20	8·6	7·4	126
11	12	11·3	11·0	138
12	10	14·7	14·2	130
13	10	8·0	6·8	118
14	9	7·8	6·5	90
15	7	8·6	8·0	94
16	4	6·6	6·0	98
17	3	9·8	7·7	93
18	1	8·0	8·0	74
19	1	5·5	5·5	145
20	1	3·0	3·0	91
21	1	8·0	8·0	91
22	1	9·0	9·0	75
	BAREILLY			
10	13	20·7	19·5	264
11	9	26·2	25·0	255
12	5	28·9	28·4	249
13	4	32·2	31·7	256
14	2	33·8	33·8	262
	BHAGALPUR			
10	6	25·7	24·0	234
11	1	42·0	42·0	235
	BHOPAL			
10	20	19·9	17·9	255
11	18	19·6	18·9	243
12	15	22·5	22·1	238
13	15	20·9	19·8	245
14	15	20·0	19·2	247
15	13	13·3	11·5	256
16	12	7·4	5·3	251
17	9	8·1	4·2	197
18	6	8·6	1·3	33
19	4	6·6	1·3	183
20	3	7·3	4·4	285
21	1	19·5	19·5	280
22	1	37·5	37·5	265
23	1	50·5	50·5	275
24	1	70·5	70·5	275
25	1	91·0	91·0	280
	BHUJ			
10	42	17·9	14·5	297
11	31	20·1	16·8	300
12	23	19·9	16·8	294
13	23	20·3	16·5	291
14	21	18·8	15·9	282
15	19	15·6	14·7	293
16	18	14·0	12·8	292
17	16	13·9	10·7	290
18	12	16·8	13·8	281
19	6	9·9	7·7	281
20	6	15·6	11·1	298
21	4	24·1	18·7	286
22	2	9·0	5·6	348
	BIKANER			
10	17	26·1	24·1	292
11	9	23·2	19·5	290
12	5	19·6	17·4	287
13	4	23·1	21·5	293
14	3	27·3	26·7	294
15	3	22·3	20·7	289
16	3	15·8	15·4	267
17	1	9·0	9·0	260
18	1	4·0	4·0	295
19	1	5·5	5·5	260
	BOMBAY			
10	29	10·1	7·0	251
11	20	13·2	10·6	249
12	17	13·5	11·9	245
13	15	13·8	9·7	267
14	14	11·9	8·2	230
15	13	11·0	6·3	258
16	9	9·9	5·5	288
17	7	7·6	1·5	302
18	4	12·2	1·3	127
19	3	14·3	3·8	346
20	3	13·8	2·2	271
21	2	11·5	10·6	98
22	2	13·0	12·6	76
23	2	15·7	15·7	72
24	1	17·5	17·5	85
25	1	26·5	26·5	80
26	1	18·0	18·0	100
	CALCUTTA			
10	7	10·6	9·6	215
11	6	12·3	10·5	213
12	5	14·7	14·0	210
13	1	6·5	6·5	150
14	1	4·0	4·0	165

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

OCTOBER 1950

Height in Km.	n	V	v	D
	CALCUTTA *(Contd.)*			
15	1	3·5	3·5	170
16	1	4·5	4·5	165
17	1	4·0	4·0	120
18	1	15·1	15·1	170
19	1	7·5	7·5	175
20	1	13·5	13·5	160
21	1	13·0	13·0	160
22	1	15·0	15·0	170
23	1	16·0	16·0	175
24	1	30·0	30·0	180
25	1	28·5	28·5	175
26	1	28·5	28·5	175
	COCHIN (Willingdon Island)			
10	15	7·1	7·9	116
11	8	13·7	13·5	120
12	7	14·5	12·9	113
13	6	12·9	11·2	108
14	5	18·2	12·4	116
15	2	13·0	13·0	134
16	2	23·5	17·5	95
17	2	20·0	15·9	113
18	1	13·0	13·0	130
19	1	15·5	15·5	125
20	1	19·5	19·5	140
21	1	20·5	20·5	130
22	1	18·0	18·0	150
23	1	23·5	23·5	150
24	1	33·5	33·5	135
25	1	33·5	33·5	130
26	1	38·0	38·0	130
27	1	39·5	39·5	125
28	1	36·5	36·5	125
29	1	28·0	28·0	140
	COOCH BEHAR			
10	1	8·5	8·5	340
	CUTTACK			
10	12	11·3	4·4	197
11	7	13·3	10·6	186
12	7	15·3	13·4	180
13	7	15·8	13·0	172
14	4	15·6	12·5	205
15	2	11·3	10·9	181
16	2	8·5	8·3	38
17	1	14·0	14·0	185
	DEOLALI			
10	16	11·3	10·5	265
11	13	15·1	13·8	252
12	12	16·5	15·4	249
13	11	15·7	13·7	244
14	10	13·7	11·0	240
15	9	12·5	10·3	270
16	7	10·2	5·7	277
17	5	7·6	5·7	311
18	4	6·6	3·6	56
19	3	19·0	6·3	307
20	2	5·5	5·3	87
	DIBRUGARH			
10	8	19·7	19·6	240
11	7	20·0	20·0	239
12	5	23·0	23·0	246
13	4	22·0	21·5	249
14	2	22·0	21·5	248
15	1	26·0	26·0	240
	GADAG			
10	25	6·9	3·5	192
11	20	8·2	6·6	189
12	17	11·9	10·8	161
13	15	13·3	11·2	159
14	11	7·5	6·2	135
15	7	5·9	5·3	82
16	6	8·4	8·1	99
17	5	8·3	8·0	100
18	2	10·8	10·5	95
19	1	8·0	8·0	85
	GAYA			
10	17	21·3	20·5	231
11	10	23·2	21·9	228
12	5	26·5	25·6	220
13	4	20·6	19·5	215
14	3	29·5	21·3	226
15	2	25·0	23·0	235
16	1	15·0	15·0	200
17	1	16·5	16·5	175
	GOPALPUR			
10	11	11·1	7·6	190
11	9	13·8	11·2	188
12	8	15·4	12·6	175
13	5	13·5	9·4	192
14	5	16·7	12·8	177
15	2	8·0	6·7	101
16	1	18·0	18·0	115
	GORAKHPUR			
10	24	30·8	29·6	238
11	17	38·8	37·4	231
12	7	36·2	34·7	236
13	4	30·2	29·0	234
14	2	25·5	24·7	234
15	1	7·0	7·0	215
16	1	5·0	5·0	335
17	1	8·0	8·0	315
	HYDERABAD (Dn.)			
10	24	8·8	6·1	208
11	20	11·1	9·5	205
12	20	12·4	11·5	186
13	17	14·5	12·8	182
14	16	13·3	10·7	184
15	13	11·8	8·5	174
16	9	14·2	10·9	148
17	7	8·6	7·6	116
18	3	9·0	7·9	98
19	2	12·3	12·2	84
20	1	11·5	11·5	55
21	1	13·0	13·0	85
22	1	11·5	11·5	90
23	1	12·5	12·5	70
24	1	17·5	17·5	110
25	1	10·0	10·0	115
	JAGDALPUR			
10	27	10·9	8·2	204
11	21	13·6	11·1	193
12	19	15·6	14·3	186
13	18	16·1	14·8	181
14	16	13·2	10·9	194
15	13	10·5	7·9	180
16	9	7·2	4·8	129
17	6	12·3	8·1	171
18	5	16·7	12·6	18
19	3	20·3	17·8	19
20	1	20·5	20·5	18
21	1	6·0	6·0	15
	JAMSHEDPUR			
10	7	22·4	21·6	2
11	6	26·3	26·2	2
12	5	29·1	27·0	2
13	5	27·5	25·0	2
14	4	23·9	22·7	2
15	4	15·4	15·2	2
16	1	3·5	3·5	2
17	1	1·0	1·0	2
18	1	7·0	7·0	1
19	1	9·5	9·5	
	JHARSUGUDA			
10	17	19·3	18·1	2
11	13	21·0	20·4	2
12	10	21·1	18·8	1
13	7	19·0	16·6	1
14	5	15·9	15·2	1
15	5	12·1	15·5	1
16	3	7·5	6·2	1
17	2	9·3	9·2	1
18	1	8·0	8·0	1
	JODHPUR			
10	26	26·3	23·9	2
11	20	28·9	25·5	2
12	13	28·1	24·3	2
13	11	30·9	24·5	2
14	8	27·9	26·4	3
15	6	31·0	30·8	3
16	5	32·1	29·6	3
17	3	27·7	27·2	2
18	2	43·5	42·9	2
19	2	46·5	45·8	2
20	2	51·0	50·2	2
21	2	54·3	54·0	2
22	1	128·5	128·5	2
23	1	116·0	116·0	2
	JABALPUR			
10	37	21·1	19·6	2

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level.

OCTOBER 1950.

Height in Km.	n	V	v	D
	JABALPUR (Contd.)			
11	35	22·7	21·5	236
12	25	29·4	28·6	231
13	18	30·4	30·4	230
14	15	29·3	28·1	234
15	7	38·3	22·4	240
16	5	17·1	17·0	242
17	2	13·0	12·8	242
18	1	7·0	7·0	275
	MADHOSAGAR			
10	34	23·1	21·8	259
11	18	23·0	22·2	246
12	10	20·2	19·3	248
13	8	20·4	19·5	241
14	7	19·1	18·2	246
15	6	10·2	14·8	243
16	3	7·7	6·9	233
17	3	7·3	5·5	242
18	1	4·0	4·0	80
	MADRAS			
10	21	9·8	8·5	124
11	17	12·0	10·5	120
12	16	14·5	13·9	124
13	16	18·4	17·9	121
14	15	18·6	17·5	126
15	10	14·3	13·5	117
16	7	15·6	15·3	102
17	6	13·2	12·5	103
18	4	14·6	14·5	88
19	3	16·2	16·0	80
20	1	21·5	21·5	100
21	1	26·5	26·5	105
22	1	27·5	27·5	100
23	1	31·5	31·5	110
24	1	28·0	28·0	110
25	1	31·5	31·5	85
26	1	34·5	34·5	90
27	1	36·0	36·0	90
	MALEGAON			
10	34	11·2	9·7	264
11	21	15·3	14·5	246
12	19	16·4	15·7	231
13	18	16·4	14·3	244
14	18	14·2	12·2	251
15	17	12·1	10·9	259
16	15	11·6	8·2	260
17	13	12·8	2·2	353
18	8	5·5	3·3	120
19	7	9·2	5·8	76
20	7	8·1	4·1	84
21	5	10·7	3·3	81
22	2	15·7	1·1	309
23	1	12·5	12·5	165
24	1	11·0	11·0	165
25	1	16·0	16·0	170
26	1	16·0	16·0	180
27	1	9·0	9·0	180
28	1	14·5	14·5	260
29	1	21·0	21·0	250
	MANGALORE			
10	19	5·2	2·9	122
11	19	7·8	5·2	109
12	18	11·1	9·6	127
13	15	10·2	9·1	129
14	14	10·3	8·2	123
15	11	11·0	9·8	99
16	11	10·5	10·0	82
17	11	12·5	12·0	86
18	7	13·9	13·7	95
19	6	10·3	9·3	39
20	5	9·5	7·6	90
21	4	15·0	13·9	95
22	4	11·7	11·6	105
23	4	14·1	13·6	94
24	3	11·6	11·7	89
25	2	6·0	5·6	99
26	1	7·0	7·0	155
	MASULIPATAM			
10	26	8·7	4·9	183
11	20	11·1	9·1	163
12	20	12·8	10·9	160
13	18	15·5	13·8	150
14	16	18·4	16·7	141
15	14	17·8	16·7	145
16	12	13·6	11·5	142
17	11	14·4	11·8	139
18	8	14·8	13·2	143
19	4	16·6	15·0	150
20	3	23·3	19·3	138
21	2	11·0	10·9	105
22	1	14·0	14·0	100
23	1	14·0	14·0	105
24	1	9·5	9·5	140
25	1	4·0	4·0	40
26	1	8·0	8·0	100
27	1	4·5	4·5	140
	NAGERCOIL			
10	11	7·9	7·1	1·2
11	9	11·2	10·8	107
12	9	17·9	17·2	113
13	9	16·8	15·4	122
14	8	18·3	17·6	110
15	8	20·2	20·1	107
16	6	22·3	21·7	100
17	5	17·7	15·5	106
18	2	13·7	13·9	133
19	1	4·5	4·5	176
20	7	7·0	7·0	25
21	1	8·0	8·0	95
22	1	11·0	11·0	40
23	1	3·5	3·5	95
24	1	7·0	7·0	125
	NAGPUR			
10	40	14·7	12·2	232
11	33	17·2	15·0	229
12	30	18·7	18·0	214
13	26	18·5	16·6	217
14	23	17·5	13·9	217
15	18	12·7	8·1	222
16	13	13·0	6·5	213
17	8	14·6	8·0	247
18	5	17·1	9·3	252
19	5	15·4	6·3	286
20	3	12·3	5·1	247
21	2	13·7	9·4	205
	NEW DELHI			
10	34	25·8	24·4	264
11	28	27·5	26·4	261
12	22	27·4	25·9	257
13	14	24·8	23·8	265
14	9	26·0	24·1	254
15	8	21·8	21·3	268
16	6	13·9	12·9	272
17	6	10·7	10·1	271
18	3	10·3	10·1	265
19	2	8·5	8·5	244
	POONA			
10	25	10·9	9·4	253
11	24	11·5	10·1	250
12	21	12·4	10·4	226
13	18	11·7	10·2	228
14	16	9·6	5·9	241
15	13	8·0	2·8	257
16	11	7·1	0·6	179
17	9	5·9	2·5	68
18	3	7·5	5·3	92
19	3	8·0	5·3	50
20	2	8·7	8·3	94
21	1	10·5	10·5	80
	PORT BLAIR			
10	10	8·6	8·1	104
11	8	10·5	10·1	106
12	6	13·1	13·0	122
13	4	15·6	15·5	105
14	3	19·3	19·3	118
15	2	17·5	17·4	107
16	1	35·0	35·0	105
17	1	27·0	27·0	105
18	1	16·0	16·0	100
	RAIPUR			
10	34	15·8	13·3	221
11	22	21·2	20·1	216
12	20	22·2	21·2	208
13	17	23·6	22·4	207
14	16	20·9	19·8	215
15	10	15·4	14·2	227
16	10	11·1	9·8	225
17	8	8·1	7·3	206
18	4	6·2	5·3	233

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

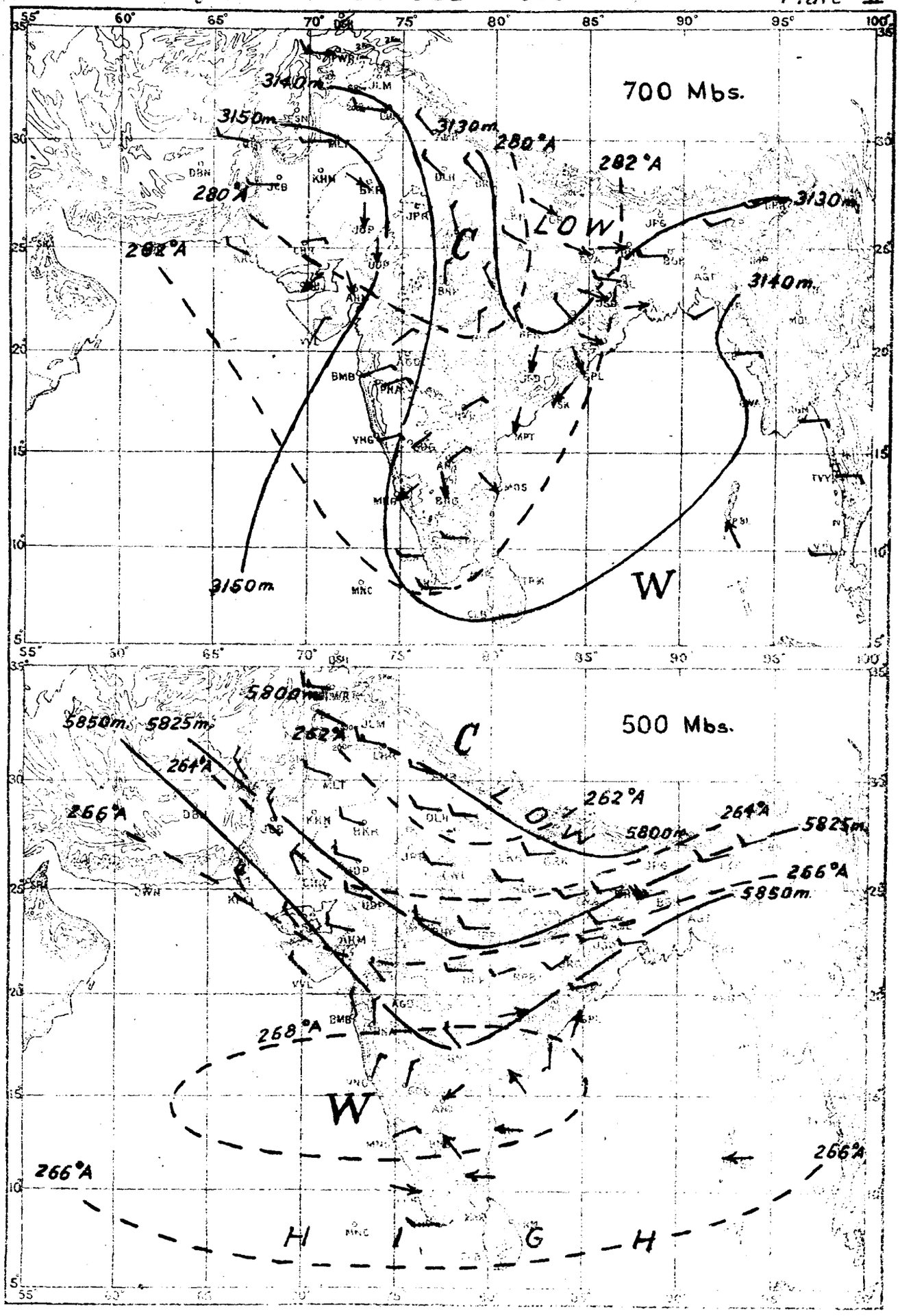
OCTOBER 1950

Height in Km.	n	V	v	D
	RAIPUR *(Contd.)*			
19	4	7·5	5·9	200
20	2	8·5	8·5	225
21	2	12·7	12·7	236
22	2	20·0	19·5	233
23	2	28·7	28·7	232
24	2	36·0	36·0	222
25	2	32·5	32·5	222
26	2	39·0	39·9	218
27	2	41·5	41·5	225
28	2	46·3	46·3	229
29	1	41·5	41·5	240
	TEZPUR			
10	17	19·0	18·3	242
11	9	21·5	21·0	238
12	6	23·0	22·5	244
13	3	14·8	14·5	242
14	2	13·0	12·3	230
15	2	10·5	10·5	250
16	2	11·0	10·9	242
17	1	11·5	11·5	240
18	1	12·5	12·5	235
19	1	5·0	5·0	185
20	1	2·5	2·5	35
21	1	3·5	3·5	115
	TIRUCHIRAPALLI			
10	15	8·3	7·7	104
11	14	11·0	10·3	105
12	13	15·7	14·5	103
13	11	19·1	18·6	111
14	9	18·2	17·5	118
15	7	10·1	7·7	115
16	3	5·2	4·8	47
17	2	6·2	4·0	73
18	2	4·2	4·2	49
	TRIVANDRUM			
10	5	11·9	11·4	119
11	5	16·5	16·1	114
12	3	13·0	12·1	115
13	3	10·7	9·9	91
14	2	12·0	2·9	222
15	2	8·5	7·5	69
16	2	15·7	15·5	81
17	1	25·5	25·5	70
18	1	38·0	38·0	90
	UDAIPUR			
10	29	21·3	19·3	290
11	19	22·2	20·4	289
12	12	20·8	20·1	282
13	11	21·9	21·0	283
14	9	21·6	19·8	276
15	9	17·8	16·8	276
16	4	13·0	12·0	296
17	1	3·0	3·0	109
	VENGURLA			
10	31	7·2	1·5	236
11	30	7·9	2·9	196
12	29	9·8	6·4	170
13	27	9·9	6·5	161
14	25	8·9	5·4	144
15	22	7·4	4·6	96
16	20	7·3	5·3	92
17	16	8·6	7·0	97
18	9	8·5	7·5	98
19	3	12·2	9·1	125
20	1	12·0	12·0	65
21	1	14·0	14·0	70
22	1	11·5	11·5	60
23	1	11·5	11·5	90
24	1	17·5	17·5	85
25	1	20·5	20·5	55
26	1	20·5	20·5	75
27	1	14·5	14·5	85
28	1	23·0	23·0	110
	VERAVAL			
10	33	13·8	11·3	302
11	26	15·0	11·8	299
12	25	15·3	12·5	287
13	22	15·2	12·4	276
14	19	12·3	11·1	280
15	16	11·4	9·7	284
16	13	10·3	7·1	281
17	10	8·2	5·7	276
18	9	7·9	3·4	309
19	8	7·9	3·3	311
20	6	6·5	5·1	271
21	5	7·6	4·2	310
22	3	4·0	1·1	304
23	2	5·0	4·7	320
24	2	5·5	3·7	347
25	2	5·0	2·9	40
26	2	5·7	4·1	6
27	2	6·3	3·8	8
28	2	8·0	4·0	31
29	1	12·5	12·5	85
30	1	11·5	11·5	85
31	1	11·0	11·0	85
32	1	12·0	12·0	90
33	1	13·0	13·0	85
34	1	14·5	14·5	85
35	1	17·0	17·0	85
36	1	20·5	20·5	80
37	1	21·5	21·5	75
38	1	25·5	25·5	80
39	1	27·0	27·0	80
	VISAKHAPATNAM			
10	11	12·8	10·8	182
11	9	13·7	12·8	194
12	8	15·2	14·1	176
13	7	16·8	15·3	164
14	5	21·9	20·4	165
15	4	19·0	17·7	189
16	3	7·6	6·7	156
17	1	4·5	4·5	105
18	1	7·0	7·0	40
19	1	11·0	11·0	75

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

OCTOBER 1950

Plate II



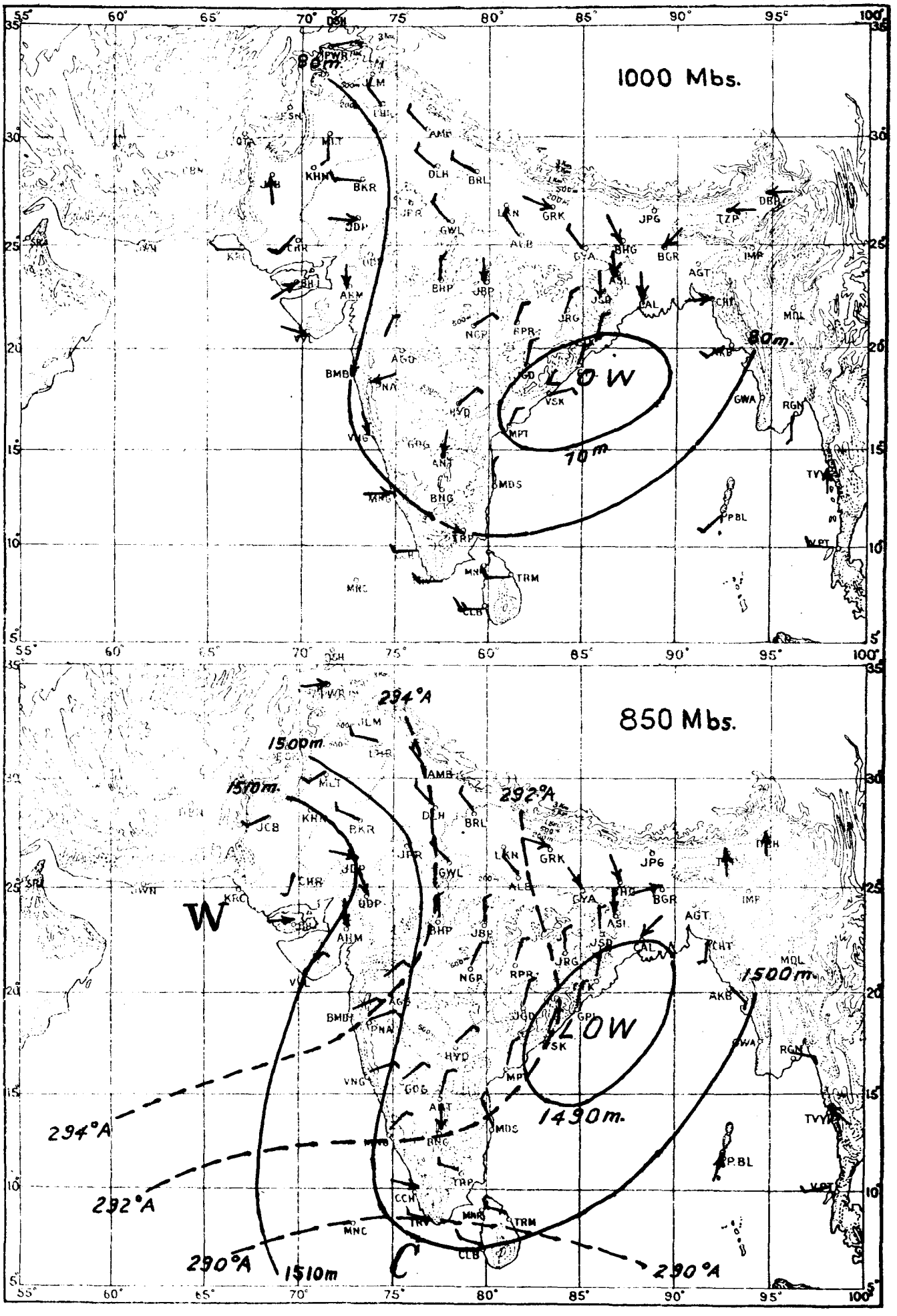
RESULTANT WIND ——— = 5 Knots ——— = 10 Knots ——— = 50 Knots

– – – – – Isotherms in degrees absolute ——— Contours in geopotential metres

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

OCTOBER 1950

Plate I



RESULTANT WIND ——\ = 5 Knots, ——\ = 10 Knots, ——◣ = 50 Knots.

– – – – – Isotherms in degrees absolute. ——— Contours in geopotential metres.

G.P.Z.-P.POONA,53.

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INDIA WEATHER REVIEW, 1950

MONTHLY WEATHER REPORT

NOVEMBER

Published by authority of the Government of India

CHIEF FEATURES :—(i) Weak northeast monsoon in the south of the Peninsula leading to moderate deficiency of rainfall in Tamilnad, (ii) formation and movement of a cyclone in the Bay of Bengal, (iii) feebleness of western disturbances and (iv) unusually by cold nights over most of the country in the second fortnight.

The northeast monsoon remained weak till the 10th November during which period, it gave satisfactory rainfall only in coastal Andhradesa. It, however, appreciably strengthened after the 10th and this led to the formation of a depression in the Bay of Bengal off the Coromandel coast by the morning of 16th. Moving in a northerly direction, the depression deepened and lay with its centre about 160 miles southsoutheast of Kakinada on the morning of 17th. The deep depression then curved towards the northeast and intensified into a cyclone by the next morning when it was centered 170 miles south of Calcutta. It crossed the east Sunderbans coast near Barisal on the early morning of 19th. Thereafter it rapidly weakened and became unimportant by the evening of 20th.

The cyclone was responsible for an abnormal wet spell in Orissa, Gangetic West Bengal, Assam and Eastern Pakistan between 17th and 19th. Rainfall was locally very heavy along and near the track of the cyclone. Chandbali and Cuttack reported 8″ each and Balasore 7″ on the 18th and Faridpur 9″ on the 19th. Calcutta had 6″ of rain during the 24 hours ending at 1730 hrs. I.S.T. on the 18th. According to press reports, the heavy rains and the high winds associated with the cyclone caused some loss of life and property in Orissa and Gangetic West Bengal. The British Cargo vessel S.S. Skeldergate while sailing off the Orissa coast between Puri and Chandbali on the 17th–18th nighth is reported to have run aground and suffered severe damage due to the high winds. Calcutta recorded a wind speed of 54 m.p.h. in gusts several times on the 18th.

The northeast monsoon considerably weakened in the south of the Peninsula after the 16th and continued weak during the rest of the month giving very deficient rainfall in the south of the Peninsula during this period.

Four western disturbances, all feeble, moved across the extreme north of the country. The first three did not cause any precipitation while the last one gave a few falls of rain or snow in Kashmir and the North-West Frontier Province on the 28th.

Under the influence of the cyclone mentioned above, cold air from northern latitudes swept over the country and caused unusually cold nights in the second half of the month over most of the country.

The total rainfall for the month was in large excess in Assam, West Bengal, Orissa and east Madhya Pradesh, in slight to moderate excess in Chota Nagpur and Mysore and normal in coastal Andhradesa. It was in moderate to large defect in the Bay Islands, west Madhya Pradesh, the Konkan, Deccan(Desh), south Hyderabad and the Madras State outside coastal Andhradesa. There was no rainfall in the rest of the country. Averaged over the plains of India the rainfall was in defect by 7%.

The mean maximum temperature was normal throughout the country except in Orissa where it was below normal. The mean minimum temperature was below normal in Bihar, Uttar Pradesh, northwest India, Madhya Bharat, Vindhya Pradesh, west Madhya Pradesh, Saurashtra and Kutch and Bombay State and was normal elsewhere.

The mean relative humidity was below normal in Bihar, Uttar Pradesh, west Rajasthan, the central parts of the country, Saurashtra and Kutch, Deccan(Desh), Hyderabad and Rayalaseema and was normal elsewhere.

The cloud amount was in excess in the Bay Islands, Orissa, Chota Nagpur, Bihar, east Madhya Pradesh, and Rayalaseema, in defect in west Uttar Pradesh, northwest India, Madhya Bharat, Saurashtra and Kutch and the Bombay State and normal elsewhere.

Data from Jammu and Kashmir are incomplete.

Table I contains the divisional and sub-divisional means of rainfall temperatures, humidity and cloud amount for the, 13 chief political divisions and the 27 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 8·30 hours I. S. T. of the date noted in the succeeding column ; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 8.30 hours I. S. T. of the date given in the succeeding column.

POONA 5,
dated the 9th March, 1951.

C. RAMASWAMY,
for Director General of Observatories

	Rainfall				Departure from normal of				
							0830 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
ivision	"	"	"		°	°	mb.	%	
ıam (includ- Manipur and pura)	1·62	1·04	+0·58	+ 56	+0·6	+1·6	+0·8	−1	0
ıst Bengal ...	3·37	0·73	+2·64	+362	−0·9	−0·9	−1·3	−1	+0·2
issa ...	8·21	1·97	+6·24	+317	−2·2	−0·5	+0·1	+5	+1·0
ıar ...	0·22	0·43	−0·21	− 49	+0·2	−1·7	−1·8	−8	+0·3
ar Pradesh...	0	0·22	−0·22	−100	+0·1	−2·1	−2·5	−10	−0·3
ıjab(I)(in- ... ling PEPSU Delhi)	0	0·12	−0·12	−100	+0·7	−2·3	−1·0	+1	−0·6
asthan ...	0	0·16	−0·16	−100	−1·3	−4·7	−1·7	−5	−0·8
-Division									
Islands ...	3·51	10·52	−7·01	− 67	+1·4	+1·2	−0·3	+2	+1·2
am (includ- Manipur and ıura)	1·62	1·04	+0·58	+ 56	+0·6	+1·6	+0·8	−1	0
ıst Bengal ..	3·37	0·73	+2·64	+362	−0·9	−0·9	−1·3	−1	+0·2
ısa ...	8·21	1·97	+6·24	+317	−2·2	−0·5	+0·1	+5	+1·0
ta Nagpur ...	0·62	0·56	+0·06	+ 11	−0·9	−1·1	−1·2	−5	+0·4
ar ...	0	0·36	−0·36	−100	+1·2	−2·1	−2·3	−10	+0·3
ır Pradesh, t ...	0	0·25	−0·25	−100	+0·6	−2·0	−3·4	−13	0
ır Pradesh, st ...	0	0·19	−0·19	−100	−0·3	−2·3	−1·6	−8	−0·6
jab (I) (in- ing PEPSU Delhi)	0	0·12	−0·12	−100	+0·7	−2·3	−1·0	+1	−0·6
mu and hmir	...	...	Data	incom	plete	...	...	...	...
ısthan, West	0	0·05	−0·05	−100	−1·1	−3·4	−1·7	−6	−0·7
ısthan, East, luding ıer)	0	0·28	−0·28	−100	−1·4	−5·7	−1·7	−4	−0·8
lhya Bharat	0	0·60	−0·60	−100	−1·1	−5·3	−3·7	−8	−0·6
lhya Pradesh	0	0·47	−0·47	−100	+0·9	−4·6	−2·6	−11	−0·2

		Rainfall				Departure from normal of				
								0830 hrs. I.S.T.		
		Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1		2	3	4	5	6	7	8	9	10
Division—*Contd.*		"	"	"		°	°	mb.	%	
8	Madhya Bharat and Vindhya Pradesh	0	0·53	−0·53	−100	−0·1	−4·9	−3·1	−9	−0·4
9	Madhya Pradesh	0·49	0·67	−0·18	− 27	0	−2·5	−2·8	−8	0
10	Bombay (including Saurashtra & Kutch)	0·21	0·85	−0·64	− 75	+0·1	−3·0	−2·8	−7	−0·8
11	Hyderabad ...	0·12	1·05	−0·93	− 89	+1·0	−1·4	−3·4	−10	0
12	Madras (including Travancore-Cochin)	4·22	6·56	−2·34	− 36	−0·6	−0·7	−0·9	−2	+0·3
13	Mysore ...	3·81	2·73	+1·08	+ 40	−1·0	−1·3	−1·2	+1	−0·2
	Mean of India ...	1·34	1·44	−0·10	−7	−0·2	−2·2	−1·9	−5	−0·2
Sub-Division- *Contd.*										
15	Madhya Pradesh, East	1·25	0·69	+0·56	+ 81	−0·1	−1·0	−2·7	−8	+0·5
16	Madhya Pradesh, West	0·02	0·67	−0·65	− 97	+0·1	−3·4	−2·8	−9	−0·3
17	Gujarat ...	0	0·48	−0·48	−100	−0·3	−4·1	−3·1	−5	−1·0
18	Saurashtra and Kutch ...	0	0·15	−0·15	−100	−1·2	−3·4	−2·7	−6	−1·0
19	Konkan ...	0·57	1·29	−0·72	− 56	−0·2	−2·4	−2·2	−3	−0·7
20	Deccan (Desh)	0·26	1·23	−0·97	− 79	+1·3	−2·5	−3·0	−11	−0·5
21	Hyderabad, North ...	0	0·97	−0·97	−100	+0·9	−1·4	−4·3	−13	−0·1
22	Hyderabad, South ...	0·24	1·13	−0·89	− 79	+1·1	−1·4	−2·7	−8	+0·1
23	Coastal Andhradesa	5·28	5·51	−0·23	− 4	−0·7	−1·6	−0·5	+2	+0·3
24	Rayalaseema	0·89	2·27	−1·38	− 61	−0·5	−1·0	−1·8	−7	+0·7
25	Tamilnad	5·25	9·33	−4·08	− 44	−0·6	0	−1·3	−4	+0·3
26	Malabar and South Kanara	2·94	4·15	−1·21	− 29	−0·3	−0·7	−0·7	0	+0·3
27	Mysore ...	3·81	2·73	+1·08	+ 40	−1·0	−1·3	−1·2	+1	−0·2
28	Travancore-Cochin	3·87	6·83	−2·96	− 43	−0·3	+0·3	+0·9	+2	+0·3

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relativ humidi %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Bay Islands																					
Port Blair ...	259	1002·1	-1·1	999·3	85·3	+1·4	87	14	74·7	+1·2	71	21	82·2	78·5	76·9	74·9	28·9	-0·3	28·1	78	+2
Assam																					
Dibrugarh ...	348	1002·3	-2·4	998·7	78·3	-0·8	87	1	62·1	+2·1	56	28,29	70·9	70·0	66·9	66·7	20·7	+0·9	20·9	80	-2
Sibsagar ...	317	1003·7	-2·0	999·9	79·6	+1·5	88	1	62·2	+2·4	56	24	70·9	70·7	67·7	68·3	21·9	+1·1	22·5	84	-5
Tezpur ...	258	1005·7	-2·3	1001·7	82·4	+1·5	90	1,2	62·7	+1·1	58	29	69·7	72·8	66·5	68·3	21·1	+1·1	21·6	84	+3
Gauhati ...	182	1008·0	-1·8	1003·5	81·8	+0·5	90	1	62·4	+1·0	58	5 days	70·1	73·8	66·9	68·2	21·1	+0·3	21·0	84	-2
Dhubri ...	115	1010·4	-1·6	1006·8	80·0	+0·6	87	5	65·8	+1·8	57	29	72·3	72·7	67·5	67·7	20·8	+0·3	20·9	77	-2
Silchar ...	96	1010·4	-2·0	1006·5	83·0	-1·9	89	4 days	65·0	+1·5	56	22	70·7	76·5	68·0	71·3	22·5	+0·8	23·1	87	+7
Tura ...	1215	971·6	...	969·0	79·1	...	86	2	61·7	...	55	28 29,30	69·1	69·4	64·5	65·5	18·8	...	16·8	78	...
West Bengal																					
Dum Dum ...	33	1012·4	...	1009·2	81·9	...	90	2	64·0	...	54	30	73·0	74·4	66·4	66·8	19·2	...	19·0	69	...
Calcutta ...	21	1012·9	-1·7	1009·6	82·6	-1·6	91	1	63·9	+0·2	54	30	72·7	73·0	67·3	67·1	20·4	+0·2	19·9	75	-1
Saugor Island ...	10	1012·5	-2·1	1009·4	80·2	-2·1	86	1,2	67·2	-0·2	59	26,27,28	74·2	74·2	68·4	67·9	21·1	-1·5	20·5	74	-1
Sandheads ...	32	1012·2	-1·3	1009·3	...	...	...	...	...	...	...	...	77·1	77·7	69·1	68·6	20·7	-2·3	19·8	66	+4
Midnapore ...	149	1008·5	-1·6	1004·9	81·3	-3·1	89	1,2,3	61·5	-1·8	51	30	71·3	75·4	64·8	68·2	18·0	0	20·3	69	+3
Contai ...	36	1011·5	...	1008·5	81·5	...	89	1	64·6	...	55	25	71·3	75·9	66·3	68·6	19·8	...	20·3	76	...
Burdwan ...	106	1009·4	-2·4	1005·9	82·9	-1·0	90	3	62·9	-1·0	54	30	69·2	75·5	63·4	69·0	17·3	-1·5	21·3	71	+2
Krishnagar ...	48	1012·1	-1·7	1008·9	83·6	-0·7	92	3	61·3	-1·0	51	29.30	70·1	74·2	65·7	68·0	19·6	-0·2	20·6	78	+9
Asansol ...	414	999·4	-1·7	995·8	83·8	-0·1	92	2,3	59·1	-0·9	50	24,25	69·3	75·7	61·1	63·4	14·9	-2·0	14·2	60	-9
Berhampore ...	62	1011·8	-1·7	1008·0	84·1	+1·3	93	3,4	61·9	-1·8	52	30	69·9	76·1	63·7	67·2	17·4	-2·4	18·7	69	-6
Malda ...	103	1010·3	-1·8	1006·8	82·2	-0·1	90	1	59·2	-1·9	50	28 29,30	72·2	74·3	63·5	65·9	16·1	-3·4	18·0	60	-12
Cooch Behar ...	145	1009·4	...	1005·5	82·7	...	91	1	61·1	...	55	5 days	70·8	73·4	65·1	67·9	18·6	...	20·8	72	...
Jalpaiguri ...	271	1004·5	-2·0	1000·7	...	...	..	...	61·2	+0·4	56	23 27,29	66·7	75·6	63·2	67·4	18·2	-0·8	19·5	82	+2
Orissa																					
Balasore ...	65	1011·2	-1·9	1008·1	81·5	-2·8	86	1,6,7	63·7	+0·5	54	26	72·0	73·8	66·2	68·0	19·1	0	20·5	72	+1
Chandbali ...	20	1012·2	-2·2	1009·4	81·8	-2·3	88	5	65·2	-0·3	55	30	72·1	75·9	68·2	70·4	21·7	+0·7	22·9	81	+4
Puri ...	20	1012·7	-1·6	1009·6	82·2	-2·4	87	1	68·0	-1·2	60	26,29	73·0	76·7	67·8	69·5	20·9	-0·8	21·3	76	+4
Cuttack ...	87	1010·1	-2·4	1006·8	83·3	-1·7	89	6,7	65·4	-0·4	56	26,30	69·9	77·5	65·6	68·3	19·3	-0·9	19·7	78	+4
Gopalpur ...	56	1011·5	-1·5	1008·3	82·9	-1·2	87	5	66·3	-1·0	56	24,26	72·0	76·7	68·4	69·3	22·1	+0·5	21·2	82	+10
Angul ...	455	998·2	-1·2	994·9	80·5	-3·3	86	2,4,6	62·5	+0·2	52	25,26	68·4	76·2	64·7	67·0	19·3	+0·4	18·7	80	+8
Sambalpur ...	486	997·0	-1·8	994·1	82·2	-1·7	90	2	60·2	-1·1	48	27	69·3	76·0	64·8	67·0	18·9	+0·8	18·5	77	+5
Jharsuguda ...	726	988·6	...	985·1	...	...	...	...	...	...	...	...	69·3	72·0	62·7	63·8	16·5	...	16·6	67	...
Titilagarh ...	691	989·8	...	986·4	83·4	...	90	1	61·8	...	50	30	69·2	76·6	64·4	67·3	18·4	...	18·6	76	...
Chota Nagpur																					
Purulia ...	835	985·4	...	981·9	82·4	...	90	2,3	61·2	...	54	24	70·1	74·5	61·2	64 2	14·8	...	16·1	58	...
Jamshedpur ...	423	999·3	-1·4	995·6	82·7	-2·3	90	2.3	60·0	+1·0	49	30	66·9	75·6	61·8	65·7	16·5	+0·1	17·1	74	+3
Chaibasa ...	742	988·0	-1·7	984·5	81·5	-1·4	90	3	59·4	-0·3	49	29	66·1	74·9	61·7	65·1	16·9	-0·4	16·7	77	+3
Ranchi ...	3.150	940·3	-1·5	937·9	77·3	-0·2	84	3	55·6	-1·6	47	25	67·2	68·8	56·5	58·4	11·5	-1·9	12·4	51	-7
Hazaribagh ...	2 003	945·1	-1·4	942·4	76·8	-0·8	85	3.4	54·4	-2·8	47	25 28,29	67·8	67·8	56·3	57·0	10·9	-2·4	11·3	47	-10
Daltonganj ...	725	989·3	-1·7	985·8	82·4	0	90	2,3	52·5	-1·9	43	4 days	65·8	75·1	58·7	63·2	13·7	-1·3	14·5	64	-12
Dhanbad ...	839	984·5	...	...	82·2	...	91	2.3	58·7	...	50	5 days	71·3	...	61·0	...	13·7	...	...	54	...
Bihar																					
Purnea ...	124	1009·5	-2·2	1006·1	83·5	+1·1	90	1	56·4	-2·2	47	28,29	67·0	71·5	61·5	66·3	16·2	-2·5	19·7	71	-10

d amount Oktas)		Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from:—																		STATION
										0830 hrs. I. S. T.										1730 hrs. I. S. T.									
Departure from normal	Mean 1730 hrs, I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																												Bay Islands
+1·2	5·8	3·51	−7·01	0·97	15	9	−4·6	5·6	−2·8	0	8	15	1	1	0	0	2	3	0	6	12	1	0	0	1	1	9	Port Blair
																												Assam
+1·5	3·0	1·32	0	0·36	19	5	+2·5	1·0	+0·4	4	6	7	0	1	1	2	3	6	1	0	0	0	0	0	0	0	29	Dibrugarh
−0·8	3·4	1·86	+0·64	0·97	19	2	−0·3	1·6	+0·5	4	7	2	2	4	4	0	1	6	4	4	1	0	0	0	0	4	17	Sibsagar
0	1·5	2·16	+1·26	0·88	30	3	+1·2	1·2	−0·3	2	9	13	0	1	0	1	1	3	0	2	1	0	0	0	0	1	26	Tezpur
−0·9	2·6	1·21	+0·66	0·72	19	2	+0·8	1·7	+0·6	9	6	4	3	2	1	1	2	2	1	5	1	1	1	0	1	1	19	Gauhati
−0·1	1·5	0·16	−0·24	0·16	19	1	+0·3	1·0	−3·0	0	6	4	0	0	2	0	0	18	0	1	1	0	1	0	0	0	27	Dhubri
+0·4	1·9	1·48	−0·27	1·14	19	3	+0·9	1·1	+0 1	0	3	4	2	1	2	1	0	17	0	0	0	0	1	1	0	0	28	Silchar
...	2·7	0·74	...	0·29	19	3	...	3·3	...	1	4	6	3	1	6	0	0	9	0	8	6	5	6	1	0	1	3	Tura
																												West Bengal
...	3·0	7·12	...	3·60	18	4	...	2·5	...	8	5	2	0	0	0	1	7	7	4	4	1	1	1	0	1	9	9	Dum Dum
+0·6	2·8	9·39	+8·58	3·35	18	5	+3·9	1·7	−0·2	2	1	0	0	0	0	2	6	19	4	1	1	0	0	0	0	0	24	Calcutta
+0·3	3·1	5·93	+4·65	2·97	18	4	+2·7	6·9	+1·4	14	4	2	1	1	0	1	7	0	14	5	0	1	1	3	0	5	1	Saugor Island
+0·6	2·6	4·69	+1·94	2·18	18	3	+0·5	...	...	11	11	2	0	0	1	1	4	0	13	5	1	1	1	0	1	5	4	Sandheads
+0·2	2·5	6·36	+5·49	4·09	18	5	+3·9	2·3	+1·0	19	6	0	1	0	0	0	1	3	0	3	2	0	2	0	0	0	23	Midnapore
...	3·8	7·69	...	6·29	18	6	...	1·6	...	10	7	0	0	0	3	0	7	3	5	2	0	1	1	1	0	4	16	Contai
+0·2	2·0	4·67	+3·81	2·71	18	4	+3·0	2·1	+0·9	7	3	1	0	0	0	6	9	4	2	1	1	0	1	3	0	2	20	Burdwan
+0·6	2·7	7·93	+6·95	2·69	19	4	+2·8	1·4	+0·2	1	4	0	0	1	0	18	3	3	0	1	0	1	1	0	0	0	27	Krishnagar
−0·5	2·2	0·30	−0·27	0·22	18	1	0	3·4	+0·3	3	2	0	0	0	0	9	15	1	1	1	0	1	0	0	2	8	17	Asansol
+0·1	2·2	1·12	+0·47	0·68	19	2	+1·3	0·9	−0·1	4	0	1	0	0	1	2	0	22	0	0	1	0	0	0	0	0	29	Berhampore
+0·3	1·6	0·09	−0·36	0·09	18	0	−0·7	2·8	+0·4	6	5	0	1	1	2	4	10	1	4	2	0	0	0	0	0	11	13	Malda
...	1·6	0·01	−0·44	0·01	19	0	−0·8	1·8	...	1	9	14	1	1	1	1	0	2	0	1	1	1	2	1	1	0	23	Cooch Behar
+0·2	1·7	0	−0·49	0	0	0	−0·8	2·2	+1·2	11	12	3	0	0	6	0	0	4	1	0	1	1	2	2	2	0	21	Jalpaiguri
																												Orissa
+1·3	3·7	8·92	+7·42	7·27	18	5	+3·5	2·7	+1·1	11	6	0	0	0	0	0	12	1	0	1	0	0	1	0	0	1	27	Balasore
+1·2	2·7 (c)	11·95	+10·30	8·18	18	4	+2·5	3·3	+0·1	2	3	1	0	0	2	1	21	0	1 (c)	17	6	2	0	0	1	0	1	Chandbali
+1·0	3·6	13·85	+10·66	8·87	18	4	+1·6	6·7	+1·0	15	8	1	0	1	0	0	4	1	6	16	1	4	1	1	0	1	0	Puri
+0·1	3·4	9·17	+7·55	7·70	18	4	+2·4	3·0	+1·8	0	2	0	0	0	0	0	0	28	0	1	0	0	0	0	0	0	29	Cuttack
+1·6	3·7	8·69	+4·76	3·83	17	7	+4·2	6·3	+0·1	21	0	0	1	0	0	0	7	1	6	6	10	2	2	1	0	2	1	Gopalpur
+1·1	3·7	3·26	+2·15	1·85	18	7	+5·6	3·4	+0·4	2	2	1	0	0	1	7	13	4	6	0	0	3	3	0	3	9	6	Angul
+0·9	2·8	1·64	+0·83	0·91	3	2	+1·0	2·3	+0·2	8	10	6	0	0	2	0	4	0	10	6	3	3	1	0	0	2	5	Sambalpur
...	2·8	0·95	...	0·63	4	3	...	...	...	15	8	0	0	0	0	0	3	4	1	2	1	0	0	0	0	0	26	Jharsuguda
...	3·8	0·85	...	0·45	4	3	...	1·6	...	2	4	2	2	2	1	2	1	14	6	3	0	0	1	0	0	1	19	Titilagarh
																												Chota Nagpur
...	2·4	0·53	...	0·34	18	2	...	2·4	...	4	2	0	0	0	0	13	11	0	7	1	0	2	0	1	1	5	13	Purulia
+0·1	2·5	0·60	+0·23	0·52	18	1	+0·3	2·3	+0·7	1	2	0	1	1	0	7	7	11	2	0	4	3	1	0	0	0	20	Jamshedpur
+0·9	3·4	2·28	+1·58	0·97	4	4	+3·0	1·2	0	0	3	0	1	0	6	0	1	19	1	1	0	2	0	2	0	0	24	Chaibasa
−0·3	1·6	0·20	−0·41	0·15	18	1	0	2·4	−0·3	4	0	1	0	0	0	1	1	23	6	1	0	0	0	0	1	3	19	Ranchi
+0·9	1·9	0	−0·56	0	...	0	−0·9	4·4	+0·1	3	4	1	0	0	1	0	12	9	5	1	0	1	0	0	1	19	3	Hazaribagh
+0·4	1·5	0·02	−0·54	0·02	19	0	−0·8	1·7	+0·2	0	2	8	1	0	1	0	1	17	1	2	0	2	1	0	12	1	11	Daltonganj
...	...	0·11	...	0·08	18	0	...	4·0	...	2	5	3	0	0	8	2	2	8	...	...	...	...	...	...	...	...	...	Dhanbad
																												Bihar
+0·3	1·4	0	0·34	0	...	0	−0·5	1·7	+0·7	0	4	0	0	0	9	8	3	6	0	0	1	0	0	0	0	0	29	Purnea

(c) Mean of 28 days

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TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar, cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
U.P. (Contd.)																						
Darbhanga ...	161	1008·5	−1·8	1005·1	83·6	+0·7	91	2	57·0	−2·5	49	28	66·5	74·0	61·4	66·1	16·4	−2·2	18·2	73	−2	64
Gotihari ...	218	1006·5	−1·8	1003·1	82·6	+0·4	91	2	53·1	−2·9	46	23,27,28	71·0	74·1	63·4	65·5	17·2	−0·8	18·4	64	−11	63
Jhansi ...	173	1008·0	−2·1	1004·6	84·1	+2·0	92	1,2	58·7	−2·3	50	28	69·9	76·3	60·2	62·9	13·4	−3·5	13·6	54	−11	44
Jhansi ...	352	1001·8	...	998·4	83·7	...	91	1	57·6	...	51	4 days	67·7	75·5	58·6	62·2	12·7	...	13·1	56	...	44
Kanpur ...	365	1001·4	−1·8	997·8	83·9	+2·6	92	3	56·3	−0·7	48	24,28,29	68·9	74·9	58·8	60·4	12·4	−1·9	11·4	51	−13	40
Kanpur ...	489	996·8	−1·9	992·6	83·4	+1·0	90	7	...	...	...	...	72·1	73·9	62·1	64·5	14·6	−2·6	16·3	54	−13	51
Kanpur ...	122	1009·7	−1·4	1006·0	82·6	+0·4	90	4 days	54·6	−2·3	45	28	69·3	72·1	61·5	64·3	15·1	−2·6	17·1	62	−14	63
U.P., East																						
Gonda ...	360	1001·6	...	998·5	84·1	+0·4	92	3	51·8	−3·1	44	28	61·4	72·9	55·5	63·5	12·1	−2·8	15·7	67	−8	58
Gorakhpur ...	254	1004·7	−2·2	1001·7	83·2	+1·1	90	1	56·9	−0·4	50	30	66·3	75·6	57·8	63·8	12·3	−4·4	15·0	56	−17	49
Jhansi ...	255	1004·8	...	1001·9	84·9	...	93	1,2	53·4	...	48	6 days	63·8	75·6	56·6	64·1	12·7	...	15·5	63	...	51
Jhansi ...	250	1005·6	−1·7	1002·3	83·1	+0·1	90	1,2,6	53·2	−2·7	47	25	65·7	76·7	56·4	62·1	11·3	−4·1	12·8	51	−17	45
Allahabad ...	322	1003·2	−1·6	1000·0	83·9	+0·5	91	1	54·0	−0·3	47	25,29	65·1	75·9	56·3	61·5	11·3	−3·1	12·1	54	−13	41
(Bamrauli) Fatehpur ...	375	1001·7	...	998·2	84·0	−0·9	91	1	52·0	−2·7	46	24	64·0	76·7	54·5	60·8	10·3	−3·8	11·1	51	− 9	32
Banda ...	398	1000·0	...	997·5	85·5	...	92	1,5	52·3	...	43	30	62·6	78·8	53·0	61·4	9·7	...	10·8	48	...	32
Kanpur ...	414	1000·2	−1·2	997·2	84·0	+1·2	91	1	51·8	−2·1	45	28	64·4	75·3	54·8	60·9	10·5	−3·2	11·7	51	−16	43
Lucknow ...	371	1001·4	−1·5	998·4	85·1	+1·2	92	1,2	53·2	−0·9	47	26	62·2	70·4	54·7	61·9	11·1	−3·1	14·8	59	−11	43
Bahraich ...	407	999·7	−1·6	997·1	83·9	+0·9	92	1	52·3	−3·8	45	28	65·4	76·3	57·9	61·4	12·8	−2·6	11·6	62	−11	4
U.P., West																						
Bansi ...	823	986·5	−1·3	983·1	83·0	−2·4	90	1	51·1	−3·8	46	28	64·5	79·0	53·1	59·2	8·9	−3·0	7·1	42	−9	2
Agra ...	553	994·9	−1·8	992·6	83·4	−1·0	91	5	51·5	−0·4	43	16,26	58·9	80·1	50·8	61·6	9·2	−1·3	10·3	53	−1	3
Mainpuri ...	516	996·4	−1·4	(o) 993·3	85·5	+0·9	93	5	50·8	−2·4	44	26	62·1	77·1	54·6	63·2	11·1	−0·8	13·4	56	−5	4
Aligarh ...	615	992·8	..	990·2	83·2	−0·5	91	5	50·5	−3·6	45	26	59·8	76·0	51·3	59·7	9·2	−0·9	10·0	51	+1	3
Bareilly ...	568	993·8	−2·1	990·9	83·3	+1·7	91	2	52·2	−1·3	44	28	61·7	73·8	54·4	60·2	11·1	−2·7	11·9	59	−15	4
Meerut ...	728	988·6	−1·6	...	81·6	0	89	4	49·6	−1·3	43	25	58·1	...	51·0	...	9·6	−1·6	...	58	−11	..
Roorkee ...	899	982·4	−2·0	979·8	80·1	+0·5	87	2,3	47·2	−2·5	41	24	56·5	72·3	51·3	59·1	11·0	−0·9	11·2	69	−7	4
Dehra Dun ...	2,239	936·2	−2·3	935·5	76·7	+0·9	83	1	48·0	−3·1	41	2	58·2	67·8	50·8	58·5	9·5	−1·3	12·9	57	−15	5
Punjab (I)																						
New Delhi ..	710	989·6	−1·2	987·0	81·9	−1·3	89	4	50·8	−1·0	44	25	59·3	74·3	48·7	58·0	6·9	−2·1	8·8	41	−9	3
Hissar ...	725	989·7	−1·0	987·1	85·1	+0·8	95	4	45·6	−4·2	38	30	50·7	77·9	45·9	61·4	8·3	−0·4	11·2	67	+13	2
Karnal ...	818	985·3	...	983·0	80·7	...	89	75	50·5	...	43	25	55·9	73·5	50·1	59·3	9·6	...	10·8	63	...	4
Ambala ..	892	982·2	−2·2	980·1	83·5	+1·4	92	5	49·1	−0·8	42	25,28	55·1	75·5	49·0	58·1	9·2	−1·3	8·3	61	−2	2
Patiala ...	822	985·2	...	982·9	80·3	...	90	1	49·8	...	44	24	57·7	72·4	50·7	59·4	9·6	...	11·2	58	...	4
Ludhiana ...	810	986·1	−1·3	983·7	83·3	+1·9	91	1	48·0	−3·0	39	30	55·3	76·2	49·6	60·0	9·6	−0·3	10·5	65	+1	3
Ferozepore ..	657	992·7	...	989·7	80·6	...	91	3,4	46·8	...	40	27	55·7	72·2	51·0	59·5	11·0	...	11·8	70	...	4
Amritsar ...	769	987·5	...	985·6	78·9	...	86	1	45·3	...	36	30	54·7	70·5	51·4	59·7	11·4	...	12·7	79	...	4
Jammu & Kashmir																						
Srinagar ...	5,205	845·3	−1·3	842·2	58·2	−4·3	65	1	31·5	+0·6	27	22,28	36·2	52·8	34·8	44·0	6·2	−0·3	6·6	88	+4	3
Gulmarg ...	8,709							Closed during winter months.														
Dras (R) ...	10,059																					
Leh ..	11,529	667·2	−1·9	664·8	44·7	−2·1	54	1	18·4	−2·0	14	26,27,30	26·9	34·6	19·0	25·7	1·1	−1·8	2·2	23	−33	3
Skardu (R) ...	7,505																					
Gilgit (R) ..	4,890																					
Misgar (R) ..	10,190																					

(O) Mean of 16 days.

(R) Register not received.

amount (ktas)		Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from:—																	STATION
										0830 hrs. I. S. T.										1730 hrs. I. S. T.								
Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
0·2	0·6	0	−0·27	0	...	0	−0·4	0·2	−0·7	0	1	4	1	0	2	14	1	7	0	0	0	0	0	0	0	0	30	**Bihar** *(Contd.)* Darbhanga
0·3	0·9	0	−0·24	0	...	0	−0·3	0·9	−0·7	1	1	4	1	0	0	2	0	21	0	0	1	0	0	0	0	0	29	Motihari
0·5	1·1	0	−0·34	0	...	0	−0·5	3·1	+1·6	1	2	9	0	3	13	5	3	3	0	1	0	0	0	5	10	3	11	Patna
...	1·7	0	−0·46	0	...	0	−0·7	2·3	...	0	0	1	0	3	21	0	4	1	4	1	1	0	0	0	0	14	10	Dehri
0·4	1·4	0	−0·49	0	...	0	−0·7	3·3	+0·4	0	0	1	1	16	7	1	0	4	3	1	1	0	0	0	7	12	6	Gaya
0·2	1·6	0·14	−0·40	0·08	19	0	−0·8	...	...	7	1	2	0	1	1	11	6	1	4	7	2	1	0	1	7	6	2	Dumka
0	1·6	0	−0·38	0	...	0	−0·7	2·6	+0·1	0	1	2	1	2	14	1	4	5	1	0	2	0	0	0	0	15	12	Sabour
0·2	0·5	0	−0·20	0	...	0	−0·5	2·3	+0·6	0	0	1	0	0	0	8	9	12	0	0	0	0	0	0	0	0	30	**U. P., East** Gonda
0	0·4	0	−0·19	0	...	0	−0·3	1·9	+1·1	2	1	3	0	0	2	16	0	6	0	0	0	0	0	1	7	0	22	Gorakhpur
...	0·9	0·16	...	0·16	19	1	...	...	...	0	0	0	0	0	1	5	0	24	0	0	0	0	0	0	0	0	30	Azamgarh
0·4	1·4	0	−0·37	0	...	0	−0·6	5·2	+3·6	0	1	0	0	2	19	6	2	0	0	1	1	0	1	1	22	5	0	Banaras
0	1·3	0	−0·31	0	...	0	−0·5	2·3	+0·6	0	1	0	0	3	11	13	1	1	2	1	1	0	0	1	12	7	6	Allahabad (Bamrauli)
0·2	0·8	0	−0·09	0	...	0	−0·4	2·5	+1·0	1	0	0	0	1	1	11	1	15	1	0	0	0	0	0	0	0	29	Fatehpur
...	0·7	0	...	0	...	0	...	1·3	...	0	0	0	0	0	2	14	1	13	0	1	0	0	0	1	8	3	17	Banda
0·3	0·3	0	−0·35	0	...	0	−0·4	4·3	+1·8	1	1	0	0	0	5	16	1	6	4	1	0	0	0	0	8	5	12	Kanpur
0	0·5	0	−0·22	0	...	0	−0·4	1·3	+0·4	0	0	1	0	0	2	14	0	13	0	0	0	0	0	1	4	1	24	Lucknow
0	0·4	0	−0·28	0	...	0	−0·5	2·3	+1·1	0	0	0	1	0	3	9	3	14	0	0	0	0	0	0	8	0	22	Bahraich
0·3	0·3	0	−0·29	0	...	0	−0·5	2·1	+0·4	0	3	0	0	0	4	9	1	13	0	0	0	0	0	0	0	1	29	**U. P., West** Jhansi
0·8	0·1	0	−0·14	0	...	0	−0·3	1·1	−1·0	1	0	0	0	0	0	2	1	26	0	0	0	0	0	0	2	1	27	Agra
0·7	0·3	0	−0·15	0	...	0	−0·3	2·5	+1·6	0	0	0	0	0	9	14	7	0	0	0	0	0	0	2	10	9	9	Mainpuri
0·6	0·2	0	−0·03	0	...	0	−0·1	3·9	+1·0	0	0	0	0	0	0	11	1	18	0	0	0	0	0	0	3	6	21	Aligarh
0·5	0·5	0	−0·18	0	...	0	−0·3	1·7	+0·9	0	0	0	0	0	0	8	4	18	1	0	0	0	1	0	7	3	18	Bareilly
0·6	...	0	−0·13	0	...	0	−0·3	3·5	...	0	1	0	0	0	0	8	12	9	...	...	...	...	...	...	...	...	...	Meerut
0·3	0·5	0	−0·23	0	...	0	−0·5	1·7	+0·7	0	0	0	0	0	0	0	6	24	1	0	0	0	0	0	0	5	24	Roorkee
0·7	0·6	0	−0·35	0	...	0	−0·7	2·0	+0·2	0	2	0	0	0	1	3	0	24	0	0	0	0	0	0	0	0	30	Dehra Dun
0·5	0·3	0	−0·10	0	...	0	−0·3	5·2	...	0	0	0	0	0	3	22	4	1	4	1	0	0	0	0	4	19	2	**Punjab (I)** New Delhi
0·4	0·1	0	−0·06	0	...	0	−0·2	2·4	−0·3	1	0	1	0	2	13	7	1	5	4	0	0	0	0	0	3	13	10	Hissar
.	0·4	0	...	0	...	0	...	3·3	...	3	2	1	0	0	2	11	7	4	0	0	0	0	0	0	10	9	11	Karnal
0·9	0·3	0	−0·19	0	...	0	−0·4	4·1	+2·3	1	1	0	1	0	1	1	12	13	0	0	0	1	0	0	3	8	18	Ambala
.	0·4	0	...	0	...	0	...	4·7	...	13	2	3	2	0	0	0	9	1	10	0	0	0	0	0	1	16	3	Patiala
0·7	0·1	0	−0·13	0	...	0	−0·4	1·2	+0·4	0	0	0	1	0	0	2	3	24	0	0	0	0	0	1	5	5	19	Ludhiana
.	0·3	0	...	0	...	0	...	0·4	...	1	0	0	0	0	0	1	1	27	0	0	0	0	0	0	1	0	29	Ferozepore
.	0·7	0	...	0	...	0	...	4·8	...	4	2	3	2	0	1	1	6	11	1	0	0	0	0	0	12	13	4	Amritsar
1·0	1·9	0·03	−0·41	0·03	28	0	−1·1	1·7	−0·1	1	2	2	7	2	1	1	1	13	4	2	0	0	0	0	4	7	13	**Jammu & Kashmir** Srinagar
																												Gulmarg
																												Dras (R)
1·3	1·8	0	−0·04	0	...	0	−0·2	4·0	+2·1	0	4	0	0	0	0	0	0	26	0	3	0	2	1	10	2	1	11	Leh
																												Skardu (R)
																												Gilgit (R)
																												Misgar (R)

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Rajasthan, West																						
Sri Ganganagar ...	580	994·5	...	992·2	83·8	-1·7	92	3	45·0	-2·8	39	27	56·1	74·5	49·5	60·0	9·2	+0·1	11·5	61	+6	38
Bikaner ...	734	988·9	-1·1	986·2	85·7	-2·0	94	1,2,3	44·9	-6·4	38	22,23	55·7	81·4	45·4	60·0	5·7	-2·1	7·7	39	-6	22
Jaisalmer ...	793	986·8	...	984·3	87·7	...	97	1	54·3	...	42	30	63·5	83·5	51·9	66·1	7·9	...	13·6	44	...	38
Jodhpur ...	736	989·5	+0·7	986·7	87·2	-0·4	95	1	54·1	-1·6	47	22,25	62·3	83·2	48·3	59·4	5·2	-2·8	6·3	28	-14	17
Phalodi ...	783	987·5	...	985·5	86·8	...	96	5	53·6	...	47	23,30	60·3	83·1	50·1	62·5	7·8	...	10·1	44	...	27
Barmer ...	638	992·6	-0·1	989·8	89·1	-0·3	96	4 days.	58·1	-2·8	51	20	65·3	83·8	53·1	64·9	8·4	-2·1	12·5	40	-9	32
Rajasthan, East																						
Sikar ...	1419	966·5	...	963·4	83·3	...	91	3,4	43·5	...	36	23	57·1	75·9	50·8	65·7	9·6	...	17·0	62	...	57
Jaipur ...	1431	965·6	-1·3	963·1	83·9	-1·5	91	1,3,4	48·7	-5·0	42	28	66·5	76·5	52·8	58·3	7·9	-1·6	9·5	34	-12	29
Ajmer ...	1593	960·4	-0·9	957·8	82·0	-1·6	89	2,4	46·7	-6·0	41	23,24	57·0	75·2	49·2	55·8	8·6	-1·3	7·2	56	+5	25
Kotah ...	843	986·0	-0·8	982·8	86·2	-0·5	91	5 days	54·8 (b)	-4·3	50	18,22	62·5	80·4	52·7	60·4	9·3	-1·5	8·7	47	-2	25
Jhalawar ...	1053	978·0	-0·5	974·8	84·0	-0·7	90	5	48·2	-5·6	42	23	56·8	79·8	49·8	58·4	9·2	-2·3	7·1	58	-1	20
Udaipur ...	1910	949·7	-0·9	946·9	82·7	-2·7	88	4,5	46·8 (c)	-7·4	42	20,23	60·3	77·7	50·4	58·0	8·3	-2·0	8·9	48	-8	26
Madhya Bharat																						
Gwalior ...	681	991·2	...	987·9	83·8	...	91	5	47·4	...	41	23,24	70·3	78·0	55·2	58·9	8·7	...	8·4	32	...	26
Guna ...	1571	960·6	-0·9	958·1	83·4	-0·4	89	5	45·3	-5·8	40	18,29	58·3	77·2	50·4	59·1	9·3	-2·3	9·8	57	-3	30
Neemuch ...	1626	959·5	-1·6	956·8	83·4	-1·1	89	4	50·8	-4·3	45	20,23	62·9	78·7	49·9	56·3	7·1	-3·3	7·4	37	-11	19
Ratlam ...	1596	959·7	...	957·0	84·3	...	88	1,2	53·9	...	49	4 days	64·5	80·2	...	70·3	...	...	21·4	...	...	62
Indore ...	1839	951·4	-1·1	948·6	82·6	-1·7	87	1,2	47·9	-5·7	42	19	63·4	78·0	51·4	58·1	7·9	-5·4	8·4	41	-11	25
Bhopal (Bairagarh)	1714	955·7	-1·1	952·9	82·8	-0·3	88	1	53·1	-1·8	46	30	65·1	76·5	50·9	55·9	7·1	-5·8	7·3	33	-23	22
Madhosagar ...	757	988·3	...	985·4	84·4	...	91	5	54·5	...	50	23,24	63·6	79·0	52·8	57·7	8·8	...	6·7	40	...	20
Vindhya Pradesh																						
Nowgong ...	750	988·9	-1·1	985·7	83·7	+0·9	91	1	47·1	-5·7	40	24	59·3	76·7	51·4	60·4	9·4	-3·7	10·6	54	-17	34
Sutna ...	1041	978·2	-1·5	975·1	83·6	+1·7	91	1	50·1	-4·1	43	23,24,25	64·4	75·7	55·2	62·2	10·6	-2·3	13·0	52	-10	43
Umaria ...	1506	962·3	...	959·3	81·6	+0·1	87	1,5	48·3	-3·9	40	26	64·0	73·5	55·2	60·8	11·3	-1·9	13·1	57	-5	48
Madhya Pradesh East																						
Gondia ...	1026	978·9	...	975·5	84·3	...	90	2	56·9	...	48	26	65·5	78·8	58·3	63·3	13·4	...	12·9	62	...	89
Pendra ...	2040	944·3	-1·5	941·4	78·9	+1·3	85	1,2	55·0	-0·3	48	24,30	66·2	71·5	54·3	57·0	9·6	-3·7	10·0	44	-18	38
Champa ...	805	986·3	...	982·7	84·4	...	90	2,5	60·4	...	50	29	66·7	79·9	58·6	66·4	13·2	...	16·0	59	...	47
Raipur ...	979	980·0	-1·6	976·5	83·3	-0·4	90	2	60·2	-0·4	52	24,25,30	67·5	79·5	59·4	65·0	13·8	-2·2	14·5	59	-6	42
Kanker ...	1318	968·3	-1·3	965·0	81·5	-1·5	87	1	57·6	+0·6	45	26,27	64·7	77·7	59·7	64·8	15·2	-1·3	15·1	74	-2	47
Chanda ...	634	991·8	-1·4	987·8	87·0	+1·7	97	8,9	54·6	-4·4	45	27	65·8	81·2	57·1	64·5	12·0	-5·3	13·2	54	-16	36
Jagdalpur ...	1815	951·1	-1·1	947·9	79·3	-1·7	86	1,8	57·4	-0·5	44	25,30	63·6	73·7	60·9	64·0	17·2	-1·2	16·5	86	+4	58
Madhya Pradesh West																						
Buldhana ...	2133	940·7	...	938·0	82·5	...	88	1	60·5	...	55	19	68·4	80·1	56·3	63·1	10·6	...	12·9	45	...	37
Akola ...	925	982·1	-1·1	978·1	88·5	+0·5	94	2	53·9	-4·5	47	25,26,27	63·2	85·0	53·1	62·8	9·3	-4·2	9·6	45	-12	24
Amravati ...	1213	972·3	-1·1	968·6	86·9	+0·3	92	2	61·5	-1·1	54	25	68·9	84·1	58·0	66·7	11·5	-1·5	14·5	48	-2	36
Yeotmal ...	1481	963·1	...	959·8	85·1	...	90	1	60·4	...	56	11,18,26	71·5	79·7	58·0	61·5	10·4	...	10·5	41	...	32
Khandwa ...	1044	968·1	-1·1	974·5	87·0	-0·8	92	1	50·7	-5·8	46	4 days	63·7	81·9	53·5	61·8	9·3	-3·4	9·8	47	-11	27
Hoshangabad ...	992	980·3	-1·5	977·1	85·1	+0·5	91	1	53·2	-5·2	46	24,27	62·2	79·5	54·1	60·7	10·7	-2·8	9·7	57	-4	28
Sagar ...	1808	952·4	-1·1	949·4	80·4	-1·7	85	1,2,6	57·8	-0·6	51	23	66·9	74·1	51·9	55·0	7·2	-3·4	7·0	32	-15	23
Jabalpur ...	1289	970·2	-0·8	966·8	83·8	+1·6	89	1,5	49·2	-4·1	43	26,27,30	61·0	76·0	53·6	61·0	10·7	-3·2	11·6	58	-14	38
Seoni ...	2027	944·6	-1·5	942·3	81·1	-0·3	85	1,2,5	53·4	-2·9	46	26,27	66·2	74·2	56·9	58·8	12·1	-0·8	10·7	53	-4	38

(c) Mean of 28 days. (b) Mean of 29 days.

loud amount (Oktas)		Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from:—																	STATION
										0830 hrs. I.S.T.											1730 hrs. I.S.T.									
Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																												Rajasthan, West
-0·3	0·5	0	-0·01	0	...	0	0	1·8	-1·7	1	0	2	4	6	2	2	2	11	1	0	0	0	1	0	2	9	17	Sri Ganganagar
-0·8	0·1	0	-0·05	0	...	0	-0·1	1·4	-1·1	0	9	0	9	1	5	0	1	5	0	6	0	1	0	3	0	5	15	Bikaner
...	0·4	0	...	0	...	0	...	3·5	...	1	3	2	1	1	7	0	2	13	1	7	0	0	0	7	3	8	4	Jaisalmer
-0·9	0·3	0	-0·11	0	...	0	-0·2	2·2	-2·3	0	22	2	0	0	0	0	0	6	1	6	4	0	0	2	2	3	12	Jodhpur
...	0·2	0	-0·02	0	...	0	...	0	-0·1	1	1	2	9	13	2	1	1	0	10	2	1	1	0	3	7	6	0	Phalodi
-1·0	0·4	0	-0·03	0	...	0	-0·2	2·6	-1·0	1	0	0	0	0	0	0	12	17	1	2	1	0	0	0	1	3	22	Barmer
																												Rajasthan, East
...	0·3	0	...	0	...	0	...	2·4	...	0	0	7	3	0	0	0	0	20	1	1	0	0	0	0	6	12	10	Sikar
-0·7	0·3	0	-0·14	0	...	0	-0·3	2·8	0	5	2	4	1	0	0	0	1	17	6	1	0	0	1	0	0	13	9	Jaipur
-0·8	0·2	0	-0·19	0	...	0	-0·4	1·5	+0·3	0	0	0	0	0	0	1	2	27	3	2	0	1	0	0	0	1	23	Ajmer
-1·0	0·1	0	-0·23	0	...	0	-0·6	1·2	+0·2	1	0	1	0	0	1	2	0	25	0	0	0	0	0	0	4	4	22	Kotah
-0·9	0·2	0	-0·73	0	...	0	-1·1	1·2	0	1	2	1	0	0	0	0	0	26	6	7	2	1	0	0	0	2	12	Jhalawar
-0·5	0·1	0	-0·11	0	...	0	-0·3	1·1	...	3	0	0	0	1	1	2	3	20	1	3	6	6	1	2	0	2	9	Udaipur
																												Madhya Bharat
...	0·4	0	...	0	...	0	...	0·7	...	2	0	0	0	0	3	4	8	13	2	0	0	0	0	1	2	10	15	Gwalior
-0·3	0·4	0	-0·87	0	...	0	-0·8	2·0	+0·7	2	0	5	6	2	0	0	0	15	10	5	1	0	0	0	1	11	2	Guna
-0·9	0·2	0	-0·31	0	...	0	-0·4	2·6	-0·7	3	7	1	1	0	0	0	2	16	0	22	0	0	0	0	0	0	8	Neemuch
...	2·8	0	...	0	..	0	...	4·6	...	5	13	5	0	1	0	1	2	3	4	10	10	0	0	0	1	4	0	Ratlam
-0·6	0·5	0	-0·61	0	...	0	-0·9	2·7	-0·3	1	5	6	3	1	0	0	0	14	12	11	3	1	0	0	0	1	2	Indore
-0·5	0·5	0	-1·01	0	...	0	-1·2	4·3	+0·6	4	5	6	4	0	0	0	0	11	7	6	6	1	0	0	0	0	10	Bhopal (Bairagarh)
...	0·5	0	...	0	...	0	...	3·5	...	0	0	0	0	4	19	1	1	5	10	1	2	0	0	1	0	12	4	Madhosagar
																												Vindhya Pradesh
-0·1	0·9	0	-0·43	0	...	0	-0·7	1·0	+0·2	0	0	0	0	8	9	0	0	13	1	1	0	0	0	0	1	1	26	Nowgong
0	1·2	0	-0·35	0	...	0	-0·7	2·0	+0·3	1	0	0	0	2	5	1	0	21	3	0	3	0	0	0	1	1	22	Sutna
-0·5	1·6	0	-0·64	0	...	0	-0·7	1·4	-0·1	1	2	0	0	1	0	0	2	24	1	1	0	0	0	0	1	1	26	Umaria
																												Madhya Pradesh East
...	1·5	0	...	0	...	0	...	2·3	...	12	8	2	0	0	0	0	3	5	13	4	3	0	0	0	0	1	9	Gondia
-0·3	2·0	0	-0·72	0	...	0	-1·3	2·5	+0·5	17	1	0	0	2	0	1	5	4	10	4	3	0	0	0	1	10	2	Pendra
...	2·7	0	...	0	...	0	...	4·0	...	18	3	0	0	0	0	0	9	0	20	2	2	0	0	0	1	4	1	Champa
+0·9	3·0	0·28	-0·25	0·28	4	1	-0·1	2·4	+0·4	9	5	1	0	1	0	0	0	14	7	6	1	0	0	0	0	0	16	Raipur
+0·7	3·3	2·42	+2·04	2·30	3	2	+1·2	1·8	-0·1	1	0	0	0	0	1	0	2	26	3	11	4	0	0	0	0	0	12	Kanker
+0·1	2·7	0	-0·06	0	...	0	-1·3	2·2	+0·8	1	1	0	0	0	0	0	2	26	3	4	0	2	0	0	0	0	21	Chanda
+1·3	3·4	3·57	+2·43	2·40	3	2	+0·1	2·1	+0·5	0	6	0	0	0	1	1	5	17	2	9	2	0	0	0	2	1	14	Jagdalpur
																												Madhya Pradesh West
...	1·4	0·06	...	0·06	15	0	...	...	...	2	1	20	1	1	1	2	0	2	0	0	0	3	3	0	13	11	0	Buldhana
-0·4	1·4	0	-0·73	0	...	0	-1·0	2·8	+0·2	2	3	0	3	4	4	3	0	11	7	9	1	0	0	0	1	7	5	Akola
-0·4	1·5	0	-0·66	0	...	0	-1·0	5·5	+2·2	0	30	0	0	0	0	0	0	0	0	21	0	0	0	1	0	8	0	Amravati
...	2·4	0	...	0	...	0	...	4·9	...	4	21	2	1	1	0	0	1	0	4	20	3	1	0	0	0	2	0	Yeotmal
-0·1	0·9	0·02	-0·74	0·02	15	0	-1·5	2·4	+0·1	2	5	2	0	0	0	0	1	20	13	11	1	1	0	0	0	2	2	Khandwa
+0·2	1·4	0·01	-0·66	0·01	15	0	-0·9	1·2	-0·4	0	2	6	1	1	1	0	0	19	1	1	0	1	0	0	0	0	27	Hoshangabad
-0·1	0·7	0	-0·63	0	...	0	-0·9	6·7	-0·2	5	9	6	2	0	1	0	0	7	0	18	0	3	0	0	0	9	0	Sagar
-0·1	1·2	0·04	-0·39	0·04	15	0	-0·9	2·0	+0·8	0	1	0	21	1	0	1	2	4	4	9	2	3	0	0	0	1	11	Jabalpur
-1·3	0·6	0·03	-0·65	0·03	15	0	-1·0	3·5	+1·3	4	1	0	0	0	0	0	0	25	12	7	2	1	0	0	0	0	8	Seoni

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relativ humidi %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Madhya Pradesh West *(Contd.)*																					
Chhindwara ...	2,248	937·5	...	934·7	81·8	...	88	2	52·0	...	45	25,26	63·1	76·2	52·3	57·2	9·1	...	8·3	46	...
Betul ...	2,144	941·3	...	938·5	80·2	...	85	1	48·3	...	42	5 days	64·8	72·7	53·4	56·9	9·4	...	9·5	45	...
Nagpur ...	1,010	979·2	−1·4	975·7	86·2	+0·7	91	1	55·8	−3·3	48	27	68·3	79·9	57·1	62·7	10·9	−2·9	11·7	46	−10
Gujarat																					
Deesa * ...	466																				
Surat ...	39	1012·3	−0·5	1008·8	95·3	+3·4	100	2	62·6	−2·3	55	19	68·6	88·6	58·7	69·0	12·5	−4·0	15·4	53	−5
Ahmedabad ...	181	1007·9	−0·9	1004·9	89·4	−2·6	95	1,2	55·1	−5·9	49	20	66·2	84·5	55·5	64·8	10·2	−2·8	12·1	46	−9
Dohad ...	1,093	976·8	...	973·3	87·1	−2·0	92	2	55·2	−3·1	50	25	64·1	82·7	55·9	67·6	11·6	−1·8	16·3	57	−7
Baroda ...	115	1009·3	...	1006·6	91·4	−0·1	95	1	52·0	−5·3	46	19,20	62·1	83·3	55·3	66·6	11·9	−3·8	14·8	64	0
Saurashtra & Kutch																					
Bhuj ...	343	1002·7	−0·4	1000·1	88·8	−1·0	94	1,4	57·9	−4·1	53	20,23,30	66·6	85·5	55·9	60·7	10·5	−3·5	7·0	47	−1
Dwarka ...	37	1013·0	−0·6	1010·5	86·3	−0·8	93	6	65·7	−3·0	61	20	70·6	80·3	64·7	68·0	18·2	−1·1	17·8	70	+3
Jamnagar ...	61	1012·2	−0·5	1009·2	88·6	−2·2	95	1	56·7	−2·5	50	22	66·3	84·6	58·0	65·4	12·7	−1·1	12·8	58	−5
Rajkot ...	432	998·8	−0·7	995·8	90·0	−1·1	95	1	58·2	−2·4	51	21	67·6	87·0	55·9	63·5	10·0	−2·3	9·4	44	−7
Veraval ...	26	1012·4	−0·7	1009·6	91·7	...	98	2	60·7	...	53	20,27	71·7	81·9	56·3	71·5	8·6	...	21·6	34	−18
Bhavnagar ...	55	1012·2	−0·5	1008·8	89·8	−0·9	94	1,3,5	57·7	−4·9	51	25	62·7	86·8	51·2	65·4	7·7	−5·4	11·7	39	−10
Konkan																					
Dahanu ...	15	1011·7	...	1009·1	88·3	...	96	9	64·8	...	61	13,27,30	73·5	81·4	66·7	77·2	19·3	...	30·1	69	...
Bombay ...	35	1011·1	−1·0	1008·2	90·7	+1·3	96	8	69·9	−2·6	66	21,30	76·8	81·1	68·8	73·2	20·4	−2·7	24·3	65	−8
Alibag ...	23	1011·7	−0·6	..	87·8	−0·6	93	1,2,11	66·6	−3·1	60	29	73·4	...	66·0	...	18·5	−2·7	...	66	−1
Harnai ...	66	1009·6	...	1007·0	87·0	...	93	16	74·7	...	71	20,28	79·3	82·1	67·1	74·1	17·2	...	25·2	51	...
Devgad ...	117	1007·5	...	1004·8	89·3	...	93	4,11	70·8	...	65	28,29,30	74·3	85·8	68·1	74·7	20·5	...	24·3	73	...
Vengurla ...	29	1010·5	...	1007·3	90·7	...	94	10,16	67·2	...	58	28	75·3	84·3	69·4	75·2	21·8	...	25·8	74	...
Marmagao ...	202	1004·4	+0·8	1001·4	86·9	−1·3	91	10,16	71·8	−1·5	66	28	76·2	83·5	69·4	73·1	21·5	−1·1	23·1	69	0
Honavar ...	85	1009·3	...	1005·7	90·8	...	95	10,15	68·9	...	60	27	76·6	84·5	69·3	75·0	21·2	...	25·3	68	...
Deccan (Desh)																					
Jalgaon ...	660	990·7	...	987·7	89·2	...	94	6	51·3	...	42	19	59·8	86·5	51·9	63·6	9·7	...	9·7	55	...
Malegaon ...	1,432	965·0	−0·7	961·5	87·7	0	92	1,7,8	52·9	−4·8	47	19,20	66·9	83·2	54·3	61·2	8·7	−4·7	8·5	38	−20
Deolali ...	1,874	949·4	...	...	86·3	...	90	4 days	50·3	...	44	27	67·5	...	54·6	...	9·4	...	...	42	...
Ahmednagar ...	2,154	940·4	−1·1	936·9	86·8	+1·7	91	2,8	57·3	−0·9	48	20,29	65·8	82·6	53·4	60·6	9·0	−5·0	9·2	42	−17
Poona ...	1,834	950·8	−1·1	946·9	88·4	+1·9	93	1,5	55·3	−3·2	48	27	64·3	83·9	57·9	64·5	13·8	−1·3	12·8	67	−6
Sholapur ...	1,570	959·5	−1·0	955·4	89·5	+2·0	93	5 days	61·6	−1·2	53	26,30	73·5	86·1	59·2	63·1	11·4	−3·4	10·4	40	−17
Miraj ...	1,817	950·6	−1·4	946·7	87·5	+2·3	93	6	59·4	−3·2	47	28	67·3	84·4	58·6	65·5	13·3	−3·0	13·7	60	−2
Kolhapur ...	1,885	948·8	...	945·0	87·0	...	91	6,7,8	60·6	...	53	28,29,30	67·5	84·4	58·4	63·0	13·0	...	11·0	57	...
Bijapur ...	1,950	946·4	−1·2	942·9	86·2	+0·5	90	5,6	60·2	−2·5	51	27,28	71·7	83·7	60·4	64·4	13·3	−3·0	12·8	50	−12
Belgaum ...	2,562	924·5	−2·5	921·8	83·3	+0·6	81	6	58·9	−2·6	51	26,28	64·8	80·5	58·6	63·7	14·3	−1·6	13·3	66	0
Gadag ...	2,131	940·3	−0·8	936·8	85·9	+1·0	90	6	63·1	−1·7	55	28	73·6	81·3	63·1	64·9	15·5	−1·7	14·3	55	−10
Hyderabad, North																					
Aurangabad ...	1,905	949·2	−1·2	945·6	86·9	+0·8	91	3,7	57·9	−2·4	52	5 days	67·5	83·2	54·1	61·8	8·9	−4·6	10·1	39	−15
Parbhani ...	1,350	966·0	...	962·2	88·0	...	92	4 days	56·9	...	50	28	68·6	83·9	55·5	62·5	9·2	...	9·6	39	...
Ramagundam ...	527	995·3	...	991·4	88·5	..	92	6,8,9	65·2	...	53	26	73·7	83·1	65·1	68·5	17·3	...	17·2	61	...
Nizamabad ...	1,250	969·6	−1·7	965·9	87·0	+1·4	92	1,2	58·4	−2·0	50	27,28	67·2	84·3	59·2	63·9	13·6	−3·8	11·1	60	−8
Bidar ...	2,178	938·7	...	935·6	83·7	+1·2	88	4	63·8	−0·8	60	4 days	71·1	79·8	59·0	60·4	12·2	−3·1	10·1	47	−13

* Data not reliable

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.									
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Madhya Pradesh West *(Contd.)*
4	...	1·4	0·04	...	0·04	15	0	...	2·7	...	1	5	3	0	0	1	0	0	20	10	9	3	0	0	0	0	6	2	Chhindwara
5	...	1·4	0	...	0	...	0	...	2·5	...	1	2	7	4	0	0	0	0	16	14	13	0	0	0	0	0	2	1	Betul
9	−0·1	2·0	0	−0·77	0	...	0	−1·1	3·3	...	13	13	0	0	0	0	0	1	3	3	11	11	2	0	0	0	0	3	Nagpur
	...	...	...	...		...		...	...	...	...	...	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	**Gujarat** Deesa *
5	−0·9	0·8	0	−0·32	0	...	0	−0·5	4·3	+1·5	1	12	8	0	0	0	0	0	9	3	10	2	0	0	2	1	10	2	Surat
2	−0·8	0·1	0	−0·14	0	...	0	−0·4	3·0	+0·6	2	11	13	0	0	0	0	0	4	7	9	4	1	0	0	0	2	7	Ahmedabad
3	−1·2	0·3	0	−0·65	0	...	0	−0·9	3·7	+1·1	3	3	8	5	3	0	0	0	8	7	3	0	1	6	5	1	0	7	Dohad
1	−1·0	0·3	0	−0·80	0	...	0	−1·5	1·2	−0·5	0	7	1	0	0	0	0	0	22	4	5	0	0	0	0	1	4	16	Baroda
																													Saurashtra & Kutch
0	−0·9	0	0	−0·08	0	...	0	−0·2	2·5	−0·9	0	0	0	0	0	0	0	0	30	14	11	0	0	0	0	0	2	3	Bhuj
0	−1·3	0	0	−0·08	0	...	0	−0·1	7·8	+0·5	10	16	3	1	0	0	0	0	0	11	3	1	0	0	0	0	15	0	Dwarka
3	−0·6	0·1	0	−0·06	0	...	0	−0·2	7·4	...	0	4	7	10	6	1	0	0	2	22	5	1	0	0	0	0	2	0	Jamnagar
1	−1·0	0·4	0	−0·23	0	...	0	−0·3	4·2	+0·6	1	3	9	1	0	0	0	0	16	8	17	3	0	0	0	0	2	0	Rajkot
2	−0·9	0·1	0	−0·17	0	...	0	−0·2	6·8	...	5	19	1	0	0	0	0	0	5	0	0	0	1	4	9	7	5	4	Veraval
1	−1·4	0·2	0	−0·26	0	...	0	−0·3	1·8	−1·2	2	0	0	0	0	0	1	1	26	2	8	7	0	0	0	0	0	13	Bhavnagar
																													Konkan
2	...	0·8	0	...	0	...	0	...	6·6	...	0	0	14	14	0	0	0	0	2	15	0	0	0	0	0	0	15	0	Dahanu
7	−1·1	1·0	0·06	−0·47	0·06	15	0	−0·8	4·3	−2·0	0	15	15	0	0	0	0	0	0	11	0	0	0	1	0	0	18	0	Bombay
3	−1·1	...	0·07	−1·48	0·05	15	0	−1·4	2·0	−2·5	1	4	3	2	0	0	0	0	20	...	...	...	...	...	...	...	...	...	Alibag
2	..	1·0	0·02	...	0·02	14	0	...	6·6	...	3	12	6	3	1	0	0	1	2	0	0	0	0	0	0	10	20	0	Harnai
4	...	1·5	0·50	...	0·50	14	1	...	1·7	...	0	8	22	0	0	0	0	0	0	0	0	0	0	0	0	23	7	0	Devgad
4	...	2·1	0·02	...	0·02	7	0	...	...	...	4	1	1	0	0	0	0	0	24	0	1	0	0	0	5	2	0	22	Vengurla
7	0	2·9	1·77	+0·57	1·60	2	2	−0·4	5·4	+0·4	0	1	20	8	0	0	1	0	0	0	0	0	0	1	3	19	7	0	Marmagao
3	...	3·8	0·40	−1·48	0·28	6	1	−1·8	2·0	...	0	5	17	1	0	0	0	0	7	0	0	3	0	0	0	12	8	7	Honavar
																													Deccan (Desh)
5	...	1·1	0·06	−0·72	0·06	15	0	−0·9	2·8	...	0	0	10	8	0	0	0	0	12	2	3	7	1	0	1	2	7	7	Jalgaon
6	−1·3	0·8	0	−0·87	0	...	0	−1·2	3·1	−0·1	0	0	0	0	0	2	2	6	20	0	9	1	1	0	0	1	2	16	Malegaon
1	...	...	0·08	...	0·08	15	0	...	3·2	...	5	12	3	0	0	0	0	0	10	...	...	...	...	...	...	...	...	...	Deolali
4	−0·4	1·5	0	−1·11	0	...	0	−1·4	4·3	+0·2	0	1	0	1	0	1	0	21	6	4	19	2	0	0	0	0	5	0	Ahmednagar
1	−0·8	1·7	0	−1·08	0	...	0	−1·6	1·2	−2·5	0	0	0	0	1	1	0	0	28	0	1	5	2	0	0	11	0	21	Poona
2	−1·0	2·4	0	−1·33	0	...	0	−1·7	5·6	−0·5	1	5	11	1	1	1	0	0	10	4	9	12	1	2	0	0	0	2	Sholapur
5	+0·7	2·9	0·69	−1·13	0·56	7	2	−0·5	4·8	−0·2	6	6	3	0	0	1	0	5	9	3	10	6	2	1	1	2	1	4	Miraj
0	...	1·7	0·12	...	0·12	14	1	...	5·0	...	0	8	5	1	0	0	0	0	16	1	12	7	1	0	0	1	2	6	Kolhapur
0	−0·7	2·9	0·18	−1·09	0·15	7	1	−0·8	2·2	−0·2	7	8	3	4	1	0	0	0	7	7	11	4	2	1	0	0	2	3	Bijapur
2	+0·4	4·1	0·19	−1·36	0·10	15	1	−1·4	3·4	+0·2	5	5	6	2	2	1	0	0	9	4	10	1	2	5	1	4	0	3	Belgaum
2	−0·6	3·5	1·47	−0·31	1·16	2	3	0	3·3	−1·0	0	0	2	6	3	1	8	8	2	0	1	4	3	2	1	7	7	5	Gadag
																													Hyderabad, North
6	+0·4	2·3	0	−0·95	0	...	0	−1·3	4·8	+0·2	1	6	11	2	0	0	0	1	9	5	7	6	3	0	2	3	2	3	Aurangabad
0	...	1·6	0	−1·36	0	...	0	−1·8	...	...	0	28	0	0	0	0	0	0	2	4	13	0	0	0	0	0	0	13	Parbhani
2	...	2·4	0	...	0	...	0	...	3·3	...	5	2	1	5	2	0	3	0	12	6	12	0	4	2	1	1	1	3	Ramagundam
8	−0·4	1·6	0	−0·69	0	...	0	−1·1	1·6	−0·6	1	0	0	0	0	0	0	1	28	9	3	1	0	0	0	0	0	17	Nizamabad
2	−0·3	2·6	0	−0·86	0	...	0	−1·7	5·8	+0·3	5	5	15	4	0	0	0	0	1	9	11	6	0	0	0	0	4	0	Bidar

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Hyderabad, South																					
Gulbarga ...	1,503	961·3	−1·5	957·4	88·1	+0·8	92	1,7	61·3	−1·9	51	30	71·7	85·3	60·2	62·8	13·1	−3·3	10·4	49	−12
Raichur ...	1,311	967·8	−1·1	963·9	87·6	+1·0	93	1,6	66·4	−1·2	57	26,28	72·9	84·3	63·8	65·1	16·1	−2·7	12·5	59	−6
Hyderabad (Begumpet) ...	1,778	952·3	−1·1	949·1	86·0	+0·9	91	6	59·5	−2·1	49	27	69·0	79·7	61·7	63·3	15·8	−2·0	13·2	65	−4
Hanamkonda ...	881	982·9	−1·4	978·7	87·0	+1·7	93	1	63·6	−0·5	54	26,27	72·3	81·9	63·3	65·4	15·8	−2·8	13·9	58	−11
Khammameth ...	367	1000·2	...	996·5	86·7	...	92	1,2	65·2	...	55	4 days	71·9	82·5	66·7	68·6	20·0	...	17·6	75	...
Coastal Andhradesa																					
Nellore ...	66	1009·7	−1·3	1006·5	85·3 (b)	0	92	7	71·7	−0·2	65	28,29,30	75·9	79·4	72·5	73·1	25·7	−0·8	25·0	84	+1
Ongole ...	38	1010·9	...	1007·3	86·1	...	95	20	70·3	...	63	26,27	74·7	81·9	69·5	72·7	22·3	...	23·3	76	...
Masulipatam ...	10	1012·1	−1·5	1008·8	84·1	−0·7	87	5 days	70·9	−0·3	63	27	76·1	79·7	71·5	72·7	25·3	+0·5	24·3	79	+1
Kakinada ...	26	1011·7	−1·4	1008·8	83·0	−0·1	89	6	69·7	−1·9	61	26,27	77·9	79·1	71·8	71·7	24·1	+0·8	23·1	73	0
Visakhapatnam ...	126	1008·1	−1·8	1005·3	82·4	−1·6	86	1,6	70·1	−2·3	61	27	76·2	78·3	69·1	69·3	21·2	−0·3	20·4	69	+6
Calingapatam ...	19	1011·9	−1·8	1008·8	81·4	−2·1	86	5,6	67·5	−1·8	57	30	71·1	78·8	68·2	71·3	22·2	−1·3	22·8	85	+6
Rentachintala ...	348	1000·8	...	997·1	87·6	+0·5	93	7	64·7	−3·0	54	26	72·7	83·0	66·3	68·4	19·3	−2·0	17·1	70	−2
Rayalaseema																					
Cuddapah ...	428	997·9	−0·9	993·5	87·4	−0·3	93	6	69·5	−0·4	61	27,29	77·5	83·2	69·6	76·0	21·2	−2·6	27·3	65	−11
Bellary ...	1,473	961·8	−1·4	958·1	85·7	−1·3	90	1,6	66·0	−0·2	58	27	72·5	82·5	64·8	66·0	17·5	−1·2	14·4	65	−3
Kurnool ...	923	980·9	−1·1	977·0	88·1	+0·2	93	5	63·4	−2·5	50	27	73·1	83·5	65·6	67·4	18·2	−1·6	15·8	65	−6
Anantapur ...	1,147	972·7	...	968·8	86·4	...	92	6	65·5	...	55	27,29	73·7	83·2	67·1	69·4	19·9	...	18·3	69	...
Tamilnad																					
Pamban ...	37	1009·8	−0·8	1006·6	84·8	−0·3	89	7	77·1	+0·9	72	11	80·5	81·1	75·2	74·6	27·5	−1·6	26·3	77	−6
Mathurai ...	437	996·4	−1·0	992·6	89·1	+2·4	95	1,2	73·1	+0·1	67	26	79·6	83·5	72·5	73·7	24·1	−1·5	24·0	70	−10
Nagapattinam ...	31	1010·4	−0·7	1007·4	84·8	+0·5	94	1	74·0	−0·4	69	26,30	77·9	80·7	73·4	73·9	28·0	+0·5	25·5	80	−2
Tiruchi ..	295	1001·6	−1·2	997·8	86·6	+0·1	95	1	72·1	+0·2	66	26,29	77·2	82·7	72·6	74·9	25·3	−1·7	26·0	79	−2
Coimbatore ...	1,341	965·8	−1·2	962·2	87·2	+1·8	91	6,7	70·0	+1·0	64	26	74·9	83·4	69·3	70·3	21·9	−1·7	19·4	74	−8
Salem ...	913	980·2	−1·2	976·2	87·8	+0·8	93	1	69·5	+0·3	63	26,29,30	74·1	82·6	69·8	72·8	22·9	−0·8	23·3	80	+2
Kallakurichi ...	416	997·2 (b)	...	993·3	86·9	...	95	1	70·5 (b)	...	64	25,26,30	76·2 (b)	81·9	70·7 (b)	71·3	23·2	...	20·7	75 (b)	...
Cuddalore ...	39	1010·1	−1·2	1007·0	84·8	+0·4	94	1	71·5	−1·2	64	25,30	76·5	79·9	72·5	73·4	25·5	−1·6	25·2	82	−2
Vellore ...	703	987·6	−0·9	984·2	85·4	+1·1	91	6,7	68·2	−0·9	59	4 days	74·7	81·4	69·9	71·6	22·8	−1·7	22·1	77	−7
Madras ...	51	1009·9	−1·4	1006·9	84·0	−1·4	89	6,7	71·9	0	65	29,30	76·7	79·6	72·5	72·5	25·3	−1·5	24·1	81	−2
Arogyavaram ...	2,299	934·4	...	931·4	79·3	...	85	6	63·2	...	54	26	70·0	75·0	64·9	65·6	18·7	...	17·3	76	...
Malabar And South Kanara																					
Mangalore ...	72	1008·7	−1·1	1005·5	86·3	−1·5	90	11	72·1	−1·5	65	26,30	76·2	82·8	71·7	74·0	24·5	−0·8	24·7	79	+4
Kozhikode ...	27	1010·1	−1·3	1006·9	88·3	+1·0	91	8	74·0	+0·1	70	18,26,29	79·1	84·3	74·0	76·6	26·4	−0·7	27·8	78	−4
Palghat ...	319	1000·4	...	996·5	89·0	...	93	8,10	72·7	...	68	27	78·3	84·0	73·1	75·1	25·5	...	25·7	77	...
Mysore																					
Chitaldrug ...	2,405	930·2	−1·3	927·0	81·7	−1·5	86	6	63·0	−1·9	56	27,29	69·7	79·3	63·7	64·5	17·7	−1·1	14·7	72	+2
Hassan ...	3,149	906·8	...	903·8	79·1	−1·7	85	1,7	60·2	−1·2	51	29	65·8	75·9	61·9	64·8	17·4	−1·5	16·4	80	+4
Bangalore ...	3,021	910·8	−1·0	907·8	78·6	−0·7	82	6,7,8	61·6	−0·1	54	26,30	67·9	73·6	63·0	64·0	17·6	−1·1	16·5	77	−1
Mysore ...	2,518	926·9	−1·1	923·9	81·2	−1·1	87	1	63·4	−1·0	56	29,30	69·5	78·0	64·7	65·3	18·8	−1·3	16·2	77	0
~~Balehonnur ...~~	~~3,017~~	...	...	...	~~70·1~~	~~+0·2~~	~~83~~	~~7~~	~~59·2~~	~~−2·3~~	~~51~~	~~27,29~~	~~66·1~~	...	~~62·8~~	...	~~18·3~~	~~1·0~~	...	~~83~~	~~2~~

(b) Mean of 29 days.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Hyderabad, South
1	0	2·5	0	-1·10	0	...	0	-1·7	7·3	+1·4	2	16	11	1	0	0	0	0	0	5	13	10	1	1	0	0	0	0	Gulbarga
3	+0·9	3·9	0·78	-0·38	0·66	6	1	-0·8	5·3	-0·1	9	14	3	2	0	0	0	1	1	6	13	6	2	0	1	0	2	0	Raichur
9	-0·1	3·1	0	-1·11	0	...	0	-2·1	4·8	+1·0	0	9	3	3	0	0	0	2	13	3	15	5	4	0	0	0	2	1	Hyderabad (Begumpet)
5	-0·6	3·0	0·17	-0·93	0·12	5	1	-0·7	3·3	+0·4	10	7	0	1	3	1	0	3	5	12	12	2	2	1	0	0	0	1	Hanamkonda
5	...	4·1	2·46	...	1·28	3	3	...	2·8	...	22	0	3	0	0	0	0	1	4	6	3	18	0	0	1	0	0	2	Khammameth
																													Coastal Andhradesa
4	-0·6	4·8	9·47	-2·23	6·25	13	6	-2·8	2·6	-0·4	5	1	0	0	1	0	1	11	11	1	5	11	2	0	0	0	2	9	Nellore
1	...	2·7	2·48	..	0·88	9	4	...	3·6	...	15	5	0	2	0	0	2	3	3	4	5	15	4	0	0	0	1	1	Ongole
4	+1·3	4·6	3·87	-1·91	1·42	2	3	-1·7	5·5	+1·3	7	12	3	1	1	0	0	4	2	4	3	6	8	3	0	0	1	5	Masulipatam
0	-0·6	3·1	8·31	+2·72	3·16	4	7	+3·5	7·2	+0·2	3	14	1	1	0	2	0	9	0	0	14	5	7	0	3	0	1	0	Kakinada
3	-0·4	4·1	4·37	-0·30	1·53	17	7	+3·1	4·6	+0·8	7	8	2	0	0	0	7	3	3	1	12	10	1	1	2	0	1	2	Visakhapatnam
7	+1·8	4·8	4·50	+1·11	1·85	17	6	+3·3	8·1	+3·1	13	1	1	1	0	0	0	14	0	1	8	13	5	1	2	0	0	0	Calingapatam
8	+0·1	4·9	1·18	-0·72	0·78	3	2	-1·6	2·6	-0·7	5	2	2	0	1	3	4	2	11	11	5	4	0	0	0	0	0	10	Rentachintala
																													Rayalaseema
3	+0·5	4·5	1·12	-2·41	0·50	13	3	-2·2	2·1	-1·3	0	0	2	0	0	0	2	0	26	0	0	16	0	0	0	0	1	13	Cuddapah
2	+1·7	4·7	1·01	-0·96	0·46	2	3	-0·1	2·3	-0·1	0	0	0	1	0	0	0	0	29	1	8	5	2	0	0	0	2	12	Bellary
9	-0·1	3·7	0·21	-0·98	0·16	3	1	-1·1	1·8	-0·6	0	2	3	3	1	0	1	1	19	3	8	8	5	0	0	0	0	6	Kurnool
6	...	3·5	1·23	-1·14	0·63	3	4	+0·3	4·8	...	4	5	6	0	0	1	1	2	11	4	12	6	1	0	0	0	1	6	Anantapur
																													Tamilnad
4	+0·4	5·5	8·64	-3·08	3·68	11	7	-6·0	8·0	-0·1	5	4	0	7	1	1	1	11	0	9	11	2	1	6	0	0	1	0	Pamban
9	-0·2	5·7	0·31	-5·12	0·19	10	1	-7·0	2·6	-1·5	8	6	0	0	0	0	1	2	13	1	11	10	3	0	0	0	0	5	Mathurai
3	+0·9	5·8	13·65	-3·89	5·87	15	10	-3·0	6·6	+0·5	4	3	0	1	0	2	2	12	6	3	19	0	4	0	1	0	1	2	Nagapattinam
9	+0·4	5·8	5·09	-0·75	2·30	3	7	-1·5	5·3	+1·5	11	9	0	0	0	1	1	5	3	3	13	9	1	2	0	0	2	0	Tiruchi
9	-0·9	4·6	2·44	-1·59	0·61	11,15	4	-2·8	3·3	+1·1	10	11	3	0	1	2	1	1	1	4	12	8	1	2	1	1	1	0	Coimbatore
6	+0·4	5·4	2·04	-1·77	0·59	15	5	-1·2	3·8	+1·2	0	3	10	0	1	0	6	1	9	3	2	13	3	1	0	1	1	6	Salem
9	...	5·5	3·08	...	0·80	14	5	...	...	...	4	3	0	0	0	0	1	5	17	1	20	0	0	0	1	0	2	6	Kallakurichi
3	+0·4	5·1	8·45	-7·07	3·90	15	9	-2·6	5·2 (b)	+1·4	10	2	1	0	0	5	0	7	4	3	17	1	6	0	0	0	1	2	Cuddalore
4	+0·3	5·6	0·91	-6·77	0·28	15	3	-5·5	3·3	+1·3	0	2	0	1	2	0	0	2	23	2	14	10	1	1	0	1	1	0	Vellore
6	+0·8	5·5	5·72	-8·24	2·63	16	8	-3·1	8·4	-0·9	9	3	0	1	1	0	6	10	0	13	9	1	3	1	0	0	2	1	Madras
1	...	5·6	1·78	...	0·54	1	4	...	2·1	...	5	2	0	1	3	0	0	2	17	5	8	1	0	0	0	0	3	13	Arogyavaram
																													Malabar And South Kanara
9	+0·5	3·7	2·84	-0·01	1·32	15	6	+1·6	4·0	0	0	1	27	0	1	0	0	0	1	3	1	0	0	2	3	7	14	1	Mangalore
3	+0·1	5·1	3·04	-2·42	1·04	12	5	-1·2	5·6	+1·8	0	14	15	1	0	0	0	0	0	0	1	2	0	0	5	14	8	0	Kozhikode
6	...	4·4	3·27	...	1·12	14	6	...	3·6	...	0	0	24	0	0	1	4	0	1	0	1	4	1	0	2	17	3	2	Palghat
																													Mysore
3	-0·1	3·8	3·07	+0·70	2·09	2	4	+0·6	2·6	-1·1	0	4	14	2	0	0	3	1	6	1	7	19	1	0	0	1	0	1	Chitaldrug
4	+0·4	4·8	3·30	+0·27	1·20	8	8	+3·4	3·3	+0·5	2	4	10	5	1	0	2	2	4	5	8	7	3	0	0	3	4	0	Hassan
4	-0·1	5·3	7·04	+4·37	2·23	4	7	+2·5	4·1	-0·3	1	7	7	1	0	2	1	1	10	4	13	4	2	1	1	0	2	3	Bangalore
7	-0·9	4·9	4·38	+1·64	1·42	7	6	+1·8	4·7	-0·3	1	7	10	1	0	0	5	0	6	5	12	7	0	0	0	3	2	1	Mysore
	...	...	1·27	-1·57	0·51	15	5	+0·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	~~Belebonnur~~

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Travancore–Cochin																					
Fort Cochin ...	10	1010·8	-1·0	1007·5	85·4	-0·3	88	9,20	75·6	+0·3	73	12	79·9	82·3	75·6	76·3	28·3	+1·1	28·2	81	+2
Alleppey ...	12	1010·7	...	1007·4	86·9	...	89	8,22,30	74·9	...	72	19	82·4	82·8	77·4	76·5	29·8	...	28·3	79	...
Trivandrum ...	211	1003·8	-0·8	1001·3	85·3	...	88	10	73·9	...	72	4 days	77·6	81·3	74·8	75·7	28·2	+0·8	27·8	87	+2
Nagercoil ...	195	1004·3	...	1001·4	87·2	...	91	8,9	73·8	...	71	13,22, 27	78·9	80·1	73·8	75·3	26·3	...	27·8	78	...
Hill Stations Excluding Kashmir																					
Aijal ...	3,599	...	...	...	70·7	...	77	2,7	...	...	...	...	64·0	64·0	62·0	62·2	18·2	...	17·0	90	...
Shillong ...	4,921	851·5	-1·7	849·1	65·6	-0·4	73	4	46·3	+0·1	41	10,22	59·8	57·6	52·9	55·6	10·9	-1·3	14·3	64	-4
Cherrapunji ...	4,309	870·7	-1·3	868·1	67·1	-0·4	75	1,2	52·7	-1·3	46	29,30	61·7	59·0	55·8	56·9	12·8	-0·2	15·0	69	+8
Darjiling ...	7,432	777·0	-2·1	774·8	57·8	+2·2	66	1,2	43·8	+0·7	40	29,30	51·7	47·6	47·6	46·2	7·6	-1·7	10·0	76	+7
Kalimpong ...	3,965	881·8	-1·5	879·1	68·0	+1·2	74	2	53·8	+0·4	50	19	57·7	59·5	55·0	56·3	13·8	+0·5	14·4	84	+10
Katmandu ...	4,388	869·7	...	866·5	71·8	-1·0	80	1	42·0	-3·7	38	20,21	51·3	59·6	49·4	53·8	11·1	+0·4	11·6	88	+1
Muktesar Kumaon	7,592	772·9	-2 0	771·5	61·4	+2·0	68	1	43·6	+0·7	39	13	49·1	51·2	37·9	41·8	3·9	-1·3	5·5	34	-10
Mussooree ...	6,699	797·7	...	795·6	61·3	+1·8	67	1,3,11	45·5	+0·4	41	15	54·1	50·4	43·4	44·6	5·9	0	7·7	41	-6
Simla ...	7,224	782·8	-1·3	782·1	58·5	+0·2	65	1,3	44·2	0	40	15	52·5	51·3	37·5	40·9	2·5	-1·8	4·9	20	-14
Abu ...	3,945	883·3	-0·8	881·8	74·4	+0·7	80	1	53·6	-4·2	48	19,21	63·7	67·5	48·2	50·3	5·3	-3·1	5·5	27	-18
Pachmarhi ...	3,528	896·7	-1·0	894·4	74·7	+0·2	79	1,2,29	46·5	-4·2	39	24	62·1	69·6	50·7	55·3	8·1	-3·6	9·2	44	-13
Mahabaleshwar ...	4,534	864·1	-0·7	862·1	77·9	+3·8	84	6	57·9	-0·9	53	10,26	64·3	68·7	52·2	57·6	7·9	-4·2	11·2	43	-23
Mercara ...	3,781	885·9	-1·0	883·7	75·1	0	79	25	60·5	+0·1	55	17,18, 26	65·5	70·8	60·4	64·0	15·9	-1·7	17·6	73	-10
Kodaikanal ...	7,688	771·3	-0·3	769·6	61·8	+0·9	67	28	49·3	-0·1	46	18,22	53·9	54·9	51·0	53·4	11·8	-0·1	13·4	84	+5
Ootacamund ...	7,364	779·9	-0·6	778·2	65·6	+1·9	70	22,28 29	45·3	-2·8	36	26	53·1	58·1	50·7	54·5	11·7	0	13·3	85	+9
Coonoor ...	5,730	826·5	...	...	64·5	-2·5	69	20,24	51·4	-1·9	48	21	62·9	...	58·2	...	14·8	+0·6	...	77	+1
Tibet																					
Lhasa ...	12,090	651·8	...	...	59·9	...	69	4	22·1	...	14	28	38·3	...	37·1	...	7·1	...	...	92	...
Gyantse ...	13,110	625·6	...	...	56·9	+6·3	66	2	19·2	+2·0	10	24,28	37·8	...	30·1	...	3·4	-0·4	...	44	+2
Ceylon																					
Colombo ...	24	1010·1	-1·0	1007·2	85·3	-0·7	87	4 days	73·4	-0·3	71	10,21	78·5	80·2	74·5	74·7	27·4	-0·4	26·9	82	-5
Trincomalee ...	24	1010·0	-0·2	1007·0	83·5	-1·6	91	2	74·7	+0·1	70	23	78·8	80·5	75·3	76·0	28·4	+0·4	28·6	84	-2
Hambantota ...	61	1008·3	-0·9	1005·5	85·8	+0·4	88	2,3,4	73·9	0	72	11,22 28	79·0	80·3	75·0	75·6	26·4	-1·4	28·1	82	-5
Mannar ...	12	1010·7	...	1007·5	84·5	...	88	1,8,9	76·5	...	74	17	79·0	81·1	75·2	75·8	27·9	...	28·1	81	...

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																					STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.										
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	N E	E	S E	S	S W	W	N W	Calm	N	N E	E	S E	S	S W	W	N W	Calm	
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Travancore–Cochin
6	+1·6	6·6	4·22	−2·47	1·09	9	8	−0·4	5·1	+1·8	1	6	10	5	1	2	1	1	3	0	1	0	0	0	6	15	7	1	Fort Cochin
0	...	4·8	5·71	...	1·40	19	10	...	6·1	...	1	7	12	5	0	1	1	2	1	0	1	1	1	0	5	13	9	0	Alleppey
9	−1·1	6·3	3·51	−3·47	1·27	15	7	−2·5	3·8	+1·2	4	11	3	2	0	0	0	4	6	0	3	0	0	1	8	5	11	2	Trivandrum
1	...	6·2	7·23	...	2·42	13	13	...	4·0	...	1	12	1	0	0	0	3	6	7	3	4	0	0	2	2	14	2	3	Nagercoil
																													Hill Stations Excluding Kashmir
3	...	2·6	2·44	...	1·99	19	3	...	3·5 (b)	...	3	4	13	4	3	2	0	0	1	4	0	1	2	0	6	4	10	3	Aijal
4	+0·3	5·9	4·43	+2·82	3·78	19	3	+0·3	1·0	−0·2	0	0	3	2	1	1	0	0	23	0	0	0	1	0	0	0	0	29	Shillong
6	+0·3	3·3	8·50	+5·80	7·03	19	3	+1·2	4·4	+1·7	1	11	12	1	1	2	1	1	0	0	5	2	1	4	4	7	1	6	Cherrapunji
8	+0·9	4·9	0·02	−0·79	0·02	19	0	−1·2	3·7	+1·7	0	0	15	7	0	1	5	0	2	0	0	3	1	0	3	20	1	2	Darjiling
9	−1·3	2·7	0	−0·71	0	...	0	−1·4	6·0	−0·5	1	0	0	0	0	0	0	23	6	0	0	0	30	0	0	0	0	0	Kalimpong
2	−1·9	1·8	0	−0·06	0	...	0	−0·2	0·8	−0·1	1	0	1	2	0	0	0	0	26	0	0	0	0	0	0	0	0	30	Katmandu
3	−1·0	0·2	0·03	−0·39	0·03	19	0	−0·7	7·2	+2·6	0	4	5	1	0	0	7	7	6	1	0	1	0	1	8	12	4	3	Muktesar(Kumaon)
6	−0·6	0·7	0	−0·17	0	...	0	−0·9	4·0	−0·5	2	2	0	3	6	2	0	0	15	1	2	0	7	9	2	0	0	9	Mussooree
5	−0·8	0·9	0	−0·52	0	...	0	−1·1	2·0	−0·7	1	2	2	1	2	1	0	0	21	1	3	1	1	4	5	2	0	13	Simla
	−1·0	0·2	0	−0·22	0	...	0	−0·4	2·0	−0·9	0	2	0	0	0	1	0	0	27	3	0	0	0	0	1	1	3	22	Abu
0	−0·5	1·0	0	−0·74	0	15	0	−1·2	2·4	+0·5	1	15	7	0	0	0	0	1	6	4	16	0	0	0	0	1	4	5	Pachmarhi
6	−0·6	1·8	0·57	−0·99	0·54	15	1	−1·4	6·3	−1·2	1	14	14	1	0	0	0	0	0	1	6	5	0	0	0	0	18	0	Mahabaleshwar
8	−1·0	4·4	2·04	−0·96	0·87	15	5	−0·3	5·6	+1·5	2	9	9	0	0	0	3	3	4	0	8	7	0	0	0	4	5	6	Mercara
9	0	6·9	2·43	−7·76	0·74	15	7	−5·8	6·6	−0·9	5	5	4	4	1	1	0	8	2	4	0	2	2	2	0	0	13	7	Kodaikanal
3	−1·3	4·9	3·44	−2·89	0·79	2	8	−2·5	1·4	−1·3	0	1	1	0	0	0	0	0	28	1	8	1	0	1	0	0	0	19	Ootacamund
2	+0·1	...	10·83	−0·40	21·5	8	9	−3·7	3·4	+0·3	6	4	0	8	7	1	1	3	0	...	...	...	...	...	...	...	...	...	Coonoor
																													Tibet
1	...	...	0	...	0	...	0	...	0	...	0	0	0	0	0	0	0	0	30	...	...	...	...	...	...	...	...	...	Lhasa
4	−0·5	...	0	−0·05	0	...	0	−0·2	3·1	0	0	0	2	5	0	1	2	0	20	...	...	...	...	...	...	...	...	...	Gyantse
																													Ceylon
0	0	7·1	2·83	−10·02	0·51	17	8	−5·6	...	...	5	7	6	3	5	1	3	0	0	7	3	1	3	1	4	5	6	0	Colombo
6	+1·0	6·8	17·43	+3·77	4·30	29	14	+0·1	..	..	4	1	0	0	1	6	7	4	7	10	4	5	1	0	0	3	6	1	Trincomalee
2	+1·1	7·0	6·28	−0·73	2·31	9	11	+1·0	...	...	10	5	0	0	0	1	8	6	0	6	3	2	1	5	10	1	2	0	Hambantota
9	...	6·6	2·07	...	0·45	15	7	...	...	...	8	9	2	2	5	3	1	0	0	10	8	1	0	1	4	1	3	2	Mannar

TABLE *III*.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 4TH CLASS STATIONS— NOVEMBER 1950

STATION	Maximum temperature, °F				Minimum temperature, °F				Mean dry bulb temperature 0830 hrs. I.S.T. °F	Mean wet bulb temperature 0830 hrs. I.S.T. °F	Vapour pressure, millibars		Relative humidity %			Rainfall, inches				Number of rainy days (0·10" or more)		Wi
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 0830 hrs. I.S.T.	Departure from normal	Mean 0830 hrs. I.S.T.	Departure from normal	Mean cloud amount, 0830 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Resultant direction 0830 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Assam																						
Lumding ...	81·8	+2·7	90	2	61·3	+1·6	52	30	71·3	67·8	21·7	+1·4	83	−6	...	3·17	+2·02	2·75	19	2	+0·1	...
Jammu and Kashmir																						
Jammu ...	80·5	+2·5	89	1,4	54·6	−1·6	49	4 days	57·8	50·4	9·2	−0·3	56	0	0·7	0	−0·28	0	...	0	−0·6	N39E
Kargil (R) ...																						
Mysore																						
Balehonnur ...	79·1	+0·2	83	7	59·2	−2·3	51	27,29	66·1	62·8	18·2	−1·0	83	−2	...	1·27	−1·57	0·51	15	5	+0·3	...
Sikkim ...																						
Lachen ...	..	...	...	...	27·8	...	20	5 days	45·1	...	...	...	...	...	...	0·83	...	0·49	20	2	...	...
Tibet																						
Yatung (Chumbi)	54·6	+2·4	62	2	26·3	−1·4	22	4 days	39·5	35·3	5·8	−0·1	69	−11	0·9	0·35	−0·09	0·35	17	1	+0·1	...

(R) Register not received

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 5TH CLASS STATIONS— NOVEMBER 1950

Division	Station	Rainfall, inches				Number of rainy days (0.10" or more)		Division	Station	Rainfall, inches				Numbe rainy (0.10" o
		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal			Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Assam ...	Mawsynram ...	7·72	...	6·02	19	3	...	Jammu & Kashmir	Sonamarg ...	1·36	−0·19	1·06	28	3
West Bengal ...	Bankura ...	1·27	+0·62	1·04	18	2	+0·9		Gurez ...	0·69	−0·34	0·65	27	1
Bihar ...	Muzaffarpur (R) ...							Deccan (Desh) ...	Khandala ...	0·04	−0·12	0·04	14	0
	Chapra ...	0	−0·36	0	0	0	−0·5	Tamilnad ...	Palayamcottai ...	5·24	−2·19	2·56	11	7
	Arrah ...	0	−0·37	0	...	0	−0·6	Sikkim ...	Thangu ...	0·44	...	0·22	16,20	2
Punjab (I) ...	Dalhousie ...	0	−0·76	0	..	0	−0·9		Lachung (R) ..					
	Kyelang ...	0	−0·35	0	...	0	−0·8		Chungthang ...	0·33	...	0·23	2	2
	Gondla ...	0	...	0	...	0	...							
	Koksar ...	0	...	0	...	0	...							
	Kothi ..	0	...	0	...	0	...							
	Dharampore ...	0	−0·32	0	...	0	−0·8							
	Kharsali ...	0	...	0	...	0	...							
	Rana ...	0·05	...	0·05	19	0	...							
	Jamuna Chetty ...	0·05	...	0·05	19	0	...							

(R) Register not received.

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Note :—Data upto 9·0 Km. a. s. l. are given under Table A and data above 9·0 Km. under Table B.

In Tables A and B

n represents the number of observations.

V represents the mean wind speed in m./second irrespective of direction.

v represents the resultant mean velocity in m./second.

D represents the direction of the resultant mean wind in degrees East of North.

For the co-ordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Report—January 1950 and subsequent issues.

Data for Lucknow (Lat. 26°52'N. Long. 80°56'E.), which started functioning as a single flight station from 20-11-50 are lucluded in this issue.

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

NOVEMBER 1950

STATION	AHMEDABAD												ALLAHABAD											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·8	1·6	30	30	1·6	1·5	47	30	1·3	0·7	63	30	1·3	1·1	273	30	1·9	1·7	260	30	2·7	2·3	300
0·15 a.g. ...	30	6·1	5·0	46	30	8·6	8·2	67	30	2·5	1·6	62	30	4·8	3·9	309	30	4·9	3·7	299	30	4·3	3·6	307
0·6 a.s.l. ...	30	4·7	3·8	55	30	6·0	5·1	73	30	3·0	2·1	54	30	5·6	4·8	316	30	5·5	4·7	318	30	4·1	3·6	308
1·0 ,, ...	30	3·5	2·9	57	30	3·7	3·0	63	30	3·0	2·1	47	30	6·2	5·5	312	30	6·5	5·6	314	30	5·1	4·7	308
1·5 ,, ...	30	4·1	1·3	81	30	3·7	1·3	27	30	3·5	1·9	19	30	6·3	5·7	310	30	7·5	6·5	314	30	6·4	5·5	310
2·0 ,, ...	30	3·9	0·6	63	30	4·3	2·6	330	30	3·7	1·5	350	30	6·3	4·9	297	30	7·1	5·5	309	29	6·9	5·9	301
2·5 ,, ...	30	4·4	1·4	311	30	4·3	1·7	319	30	4·8	2·6	291	30	6·2	4·7	291	30	7·1	4·9	293	29	7·5	6·4	275
3·0 ,, ...	30	5·2	2·9	296	30	5·5	3·3	294	30	5·5	4·3	276	29	7·9	6·4	284	30	7·4	5·4	281	29	8·5	7·8	285
4·0 ,, ...	10	8·9	8·4	270	30	7·0	5·8	275	30	7·9	7·1	271	13	8·3	7·4	261	30	9·8	8·7	272	28	11·4	10·5	279
5·0 ,, ...	1	11·5	11·5	265	30	9·7	8·9	271	30	11·1	10·6	268	1	9·5	9·5	220	28	13·6	12·7	266	28	14·8	13·8	276
6·0 ,, ...					30	14·3	13·4	269	30	16·2	15·1	267	1	14·5	14·5	210	26	18·1	17·0	269	27	18·8	17·7	273
7·5 ,, ...					26	20·4	19·6	269	30	22·1	20·4	261					13	21·9	20·9	258	24	25·6	24·4	269
9·0 ,, ...					20	27·7	26·7	259	30	28·0	26·8	256					5	27·6	26·0	251	20	30·3	29·9	264

STATION	AMBALA												ANANTAPUR											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	2·3	2·0	323	30	1·5	1·3	334	30	2·6	2·5	301	30	1·9	1·0	111	30	1·6	0·6	53	30	2·2	1·8	40
0·15 a.g. ...	30	7·8	7·7	331	30	6·6	5·2	325	30	5·7	5·3	303	30	4·1	3·3	93	30	3·2	1·8	77	30	3·4	3·0	49
0·6 a.s.l. ...	30	8·0	7·8	329	30	7·3	7·0	326	30	6·3	5·9	304	30	4·8	4·1	90	30	4·2	3·2	87	30	3·5	3·0	47
1·0 ,, ...	30	7·0	6·7	323	30	6·8	6·5	322	30	5·6	5·3	311	30	5·4	4·9	67	30	5·7	4·5	73	30	3·9	3·4	46
1·5 ,, ...	30	5·7	4·8	318	30	6·2	5·0	319	30	5·5	4·9	316	30	5·3	4·6	45	29	6·0	5·3	56	30	4·2	3·4	46
2·0 ,, ...	30	5·4	3·7	319	30	5·7	3·7	320	30	5·1	3·4	322	26	5·5	4·4	50	28	5·7	4·6	50	29	4·9	4·0	48
2·5 ,, ...	30	6·0	3·0	311	29	5·6	2·8	316	30	5·2	2·4	313	26	5·3	4·0	58	28	5·5	4·1	56	28	5·1	3·6	58
3·0 ,, ...	27	6·6	2·9	308	29	5·9	2·3	318	30	5·8	2·8	295	22	4·7	3·5	59	26	4·8	3·3	66	26	5·0	2·7	60
4·0 ,, ...					28	6·3	3·4	276	29	6·2	4·3	279	14	4·5	2·7	82	26	4·9	3·1	81	23	4·7	2·8	69
5·0 ,, ...					26	9·0	8·2	266	27	9·4	7·9	274	11	6·8	4·7	65	26	5·9	4·0	76	21	5·9	4·4	64
6·0 ,, ...					20	12·8	11·8	262	27	14·4	13·6	270	11	7·1	5·1	78	24	6·6	4·3	88	17	7·1	6·1	80
7·5 ,, ...					4	13·6	12·1	252	19	21·8	20·5	266	3	4·5	2·8	86	16	4·9	2·8	85	13	5·8	4·4	98
9·0 ,, ...					3	23·3	22·1	244	7	26·4	24·4	263					9	4·1	1·9	111	11	5·2	3·0	112

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

NOVEMBER 1950

ATION	ASANSOL												BANGALORE											
e in I.S.T.	0230				0730				1430				0230				0730				1430			
ght in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ce ...	30	1·4	1·1	313	30	1·6	1·3	298	30	1·9	1·4	337	30	1·9	1·7	70	30	2·0	1·2	68	30	1·7	1·2	25
a. g. ...	28	3·8	3·2	335	29	4·4	3·3	327	29	3·7	3·0	336	30	5·6	4·5	54	29	5·1	3·9	51	30	3·3	2·4	35
a.s.l. ...	28	4·2	3·4	336	29	5·1	4·3	351	28	4·0	3·3	335												
,, ...	28	4·6	3·6	323	28	5·8	4·8	343	28	4·1	3·6	332	30	4·4	3·5	58	29	4·0	2·9	52	30	3·3	2·3	34
,, ...	27	4·9	4·0	315	28	5·4	4·5	328	28	5·3	5·0	332	26	5·1	4·2	34	27	5·7	4·2	41	30	3·5	2·8	45
,, ...	23	5·8	5·5	300	28	6·5	5·1	308	26	7·3	7·1	310	26	5·0	3·7	34	24	5·6	4·4	42	29	4·1	3·2	44
,, ...	12	6·0	5·6	289	27	7·6	6·1	299	25	8·9	8·5	302	22	4·7	3·6	46	22	5·4	3·8	58	26	4·2	2·8	60
,, ...	9	6·5	5·5	284	24	8·6	7·6	291	24	11·1	10·7	296	18	4·8	3·9	60	21	5·2	3·5	70	21	4·5	2·8	68
,, ...					18	9·6	8·9	281	22	12·3	11·6	286					21	5·8	4·0	80	20	5·5	4·1	69
,, ...					13	10·9	10·3	266	14	13·6	13·0	283					21	6·6	5·2	80	16	7·1	5·6	72
,, ...					7	10·1	9·4	255	13	16·3	15·7	272					20	7·9	6·4	81	14	8·6	7·2	75
,, ...					3	11·8	11·1	256	10	20·7	19·8	264					15	8·0	6·8	75	13	7·3	6·4	72
,, ...					3	13·3	12·7	231	8	24·6	23·6	265					13	6·0	4·4	109	12	7·5	5·7	98

ATION	BAREILLY								BHAGALPUR								BHOPAL							
in I.S.T.	0730				1430				0730				1430				0230				0730			
ht in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
e ...	30	0·8	0·6	295	30	2·4	2·1	286	30	0·9	0·4	243	30	2·1	1·4	289	30	1·6	1·4	38	30	1·5	1·1	53
. g. ...	30	6·6	5·7	310	30	5·3	4·9	292	30	4·3	2·7	284	30	4·4	3·0	299	30	5·0	4·5	44	30	6·1	5·2	61
s.l. ...	30	8·3	7·7	308	30	5·7	5·2	293	30	5·1	3·0	331	30	4·3	2·7	302	30	5·5	4·8	44	30	4·9	4·2	60
...	30	8·3	7·4	307	30	6·4	5·9	299	30	5·0	2·7	335	30	4·8	2·9	300	30	3·5	2·6	40	30	4·8	3·8	40
...	30	8·4	7·0	306	30	7·5	6·6	302	30	5·6	3·1	311	29	5·0	3·6	301	30	3·0	1·4	355	30	4·1	2·9	19
...	30	7·9	5·6	305	28	7·0	5·4	303	30	6·4	4·4	304	28	7·3	6·3	301	30	3·6	1·7	293	30	3·9	2·7	331
...	30	8·0	4·6	302	28	7·5	6·0	292	28	8·1	7·1	303	28	10·3	9·4	298	29	4·6	3·0	278	30	4·3	3·0	301
...	27	7·2	4·1	294	28	8·1	7·9	290	27	9·9	9·2	291	27	11·5	10·9	292	28	4·4	3·3	297	30	4·9	3·3	281
...	20	8·5	6·2	276	23	10·1	8·5	275	25	12·8	12·1	283	22	13·0	12·6	283	7	6·3	4·1	298	30	7·3	6·3	274
...	8	10·8	4·3	272	21	13·6	11·4	270	17	15·8	15·3	275	20	16·9	16·3	278	3	6·8	6·7	282	29	10·7	9·8	268
...	4	13·9	13·3	264	16	16·5	15·8	269	11	14·0	13·6	264	8	15·8	15·6	265					27	13·7	12·6	265
...					7	25·6	25·4	264	4	19·7	19·0	250	4	19·1	18·8	255					15	19·1	17·7	259
...									1	21·5	21·5	240	1	17·5	17·5	260					10	24·8	23·6	253

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

NOVEMBER 1950

STATION	BHOPAL				BHUJ												BIKANER						
Time in I.S.T.	1430				0230				0730				1430				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	1·3	0·6	25	30	0·2	0·1	258	30	CALM			30	1·8	1·0	1	30	1·8	1·3	150	30	0·8	0·4
0·15 a.g. ...	29	3·0	1·9	16	30	5·0	4·3	354	30	3·7	3·1	4	30	3·4	2·7	16	30	5·5	2·5	153	30	2·9	1·8
0·6 a.s.l. ...	29	2·8	1·7	18	30	4·9	4·1	11	30	4·9	3·6	27	37	2·9	2·5	19	30	5·1	0·8	267	30	3·0	2·1
1·0 ,, ...	30	2·5	1·7	13	30	4·0	3·0	33	30	4·2	2·7	42	30	3·3	3·5	12	30	4·5	2·7	307	30	3·2	2·5
1·5 ,, ...	30	2·9	1·9	2	30	4·0	2·4	38	30	3·6	2·1	46	30	3·0	1·9	7	30	5·0	4·1	313	30	3·7	3·0
2·0 ,, ...	30	3·5	2·0	327	30	3·9	0·8	342	30	3·6	1·3	359	30	2·9	1·3	353	30	4·9	3·9	316	30	4·3	3·6
2·5 ,, ...	30	4·9	3·9	307	30	4·5	2·2	294	30	4·5	1·5	322	30	4·0	1·9	300	30	4·9	3·8	303	30	4·9	4·1
3·0 ,, ...	30	6·3	5·3	292	30	5·4	3·7	285	30	5·3	3·9	294	30	5·0	3·7	282	30	5·8	4·5	300	30	6·2	5·3
4·0 ,, ...	30	8·5	7·7	279	28	8·3	7·5	273	30	7·3	6·5	278	30	7·0	6·3	278	28	8·2	6·5	279	30	9·1	8·1
5·0 ,, ...	29	11·2	10·4	269	24	12·0	11·4	269	30	11·8	11·2	273	30	10·8	10·0	274	24	11·7	10·4	269	30	14·1	13·2
6·0 ,, ...	27	14·3	13·6	265	16	13·9	13·5	261	30	16·5	16·0	270	30	14·8	14·0	269	16	12·6	12·0	273	24	16·8	16·4
7·5 ,, ...	21	19·7	18·9	261	1	21·0	21·0	240	27	21·2	20·6	260	30	22·1	21·1	266	7	16·9	16·5	257	15	19·8	19·0
9·0 ,, ...	14	27·6	26·3	257					21	27·4	26·3	257	26	28·9	27·7	264	2	23·5	22·8	259	7	19·1	17·4

STATION	BOMBAY												CALCUTTA										
Time in I.S.T.	0230				0730				1430				0230				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	0·4	0·3	64	30	1·0	0·8	66	30	4·3	3·6	298	30	1·0	0·6	11	30	1·7	1·3	5	30	2·7	2·2
0·15 a.g. ...	30	3·6	3·2	36	30	4·6	4·3	63	30	2·4	1·7	309	28	3·9	2·0	344	28	4·0	3·0	5	29	3·8	3·2
0·6 a.s.l. ...	30	4·7	3·8	34	30	5·2	4·7	88	28	2·1	1·6	62	28	4·8	3·5	347	28	4·6	3·9	10	29	4·5	3·7
1·0 ,, ...	30	3·7	1·7	46	30	4·5	3·7	84	27	2·6	1·6	68	28	5·9	4·3	345	27	5·3	4·4	6	28	5·1	4·2
1·5 ,, ...	30	3·5	1·7	129	30	3·6	1·6	127	29	2·9	1·2	71	28	5·8	4·8	332	27	5·1	4·1	332	27	6·3	4·9
2·0 ,, ...	30	3·7	2·0	145	30	3·4	1·0	160	29	3·5	0·1	330	27	5·9	4·8	313	26	5·1	4·1	312	27	6·7	5·1
2·5 ,, ...	27	3·6	1·3	186	30	4·1	1·1	203	30	3·6	0·5	272	21	6·6	5·8	299	26	5·8	4·8	295	27	7·2	5·7
3·0 ,, ...	25	4·3	1·3	229	30	4·9	1·7	253	30	3·5	0·8	298	16	7·9	7·2	298	25	6·5	5·9	287	27	8·8	7·1
4·0 ,, ...	7	4·0	0·7	184	30	5·1	1·8	295	29	4·7	1·6	291	1	7·5	7·5	290	19	8·1	7·2	278	24	9·9	9·1
5·0 ,, ...	2	5·7	5·7	13	30	5·9	2·9	284	29	5·7	3·4	281					14	8·6	7·8	262	25	10·4	9·1
6·0 ,, ...	1	8·0	8·0	315	28	8·1	5·5	273	29	7·5	5·1	280					10	9·2	8·4	270	22	13·8	11·9
7·5 ,, ...					17	7·9	6·7	268	29	10·1	8·4	258					4	11·1	10·1	263	21	18·2	16·3
9·0 ,, ...					5	12·3	11·7	243	24	13·9	11·8	251					1	19·0	19·0	270	16	20·0	18·2

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

NOVEMBER 1950

STATION	COCHIN (Willingdon Island)												COOCH BEHAR				CUTTACK							
Time in I.S.T.	0230				0730				1430				0730				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·1	0·9	94	30	3·1	0·8	80	30	3·4	2·9	271	30	1·1	1·0	69	30	1·0	0·7	11	30	0·5	0·3	325
0·15 a.g. ...	27	2·5	1·1	41	30	2·6	1·7	88	29	4·5	3·9	267	29	4·7	4·2	75	28	3·1	1·9	332	29	3·3	2·7	350
0·6 a.s.l. ...	27	3·0	2·3	322	30	2·9	1·3	339	29	2·6	1·8	291	29	4·1	2·7	77	28	4·2	2·3	17	28	4·8	3·6	37
1·0 ,, ...	25	2·4	1·4	355	29	2·6	1·2	9	27	2·4	1·3	15	29	4·1	1·9	79	28	5·0	3·2	12	28	5·7	4·3	31
1·5 ,, ...	22	3·1	2·2	47	27	3·2	2·2	56	25	2·6	1·8	31	28	5·3	1·9	82	28	5·2	2·8	12	27	4·7	3·1	26
2·0 ,, ...	20	3·5	2·8	56	27	3·4	2·0	64	24	3·5	2·1	52	27	5·4	1·8	75	25	4·1	2·1	348	26	3·8	2·2	19
2·5 ,, ...	15	4·3	2·4	55	21	4·0	2·5	67	23	4·8	3·1	62	27	5·0	0·6	4	21	3·9	2·0	323	26	4·1	1·9	335
3·0 ,, ...	12	5·1	3·0	48	20	4·7	3·2	62	23	4·8	3·2	68	23	7·9	5·4	288	18	4·6	1·9	312	26	5·5	2·6	291
4·0 ,, ...	2	6·5	4·7	329	16	5·2	3·3	75	19	5·2	3·2	70	18	15·6	15·3	276	11	6·2	3·4	272	24	6·2	3·6	278
5·0 ,, ...					14	4·8	3·6	102	17	6·0	4·5	78	13	15·7	14·9	273					20	5·8	4·1	280
6·0 ,, ...					12	5·4	4·3	69	16	7·1	5·4	78	7	18·8	17·9	269					18	7·3	5·2	279
7·5 ,, ...					4	3·5	3·3	75	14	6·9	6·0	73	1	15·0	15·0	255					9	8·9	7·4	267
9·0 ,, ...					2	4·3	1·3	113	9	7·4	6·4	84									8	9·6	8·8	250

STATION	CUTTACK				DEOLALI				DIBRUGARH								GADAG							
Time in I.S.T.	1430				0730				0730				1430				0230				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·3	0·5	25	22	0·6	0·5	33	30	1·9	1·5	60	30	1·6	1·1	32	30	1·0	0·3	125	30	0·9	0·9	98
0·15 a.g. ...	28	3·5	1·5	14	22	4·2	3·9	92	24	3·1	2·7	54	28	2·4	1·6	26	30	5·9	4·0	93	30	5·7	4·7	96
0·6 a.s.l. ...	28	3·7	2·4	15	22	2·0	1·9	81	24	3·3	2·7	49	28	2·3	1·0	73								
1·0 ,, ...	28	3·9	2·7	8	22	7·4	7·1	96	24	3·1	1·7	65	28	2·0	0·3	119	30	6·1	5·2	85	30	6·8	6·4	87
1·5 ,, ...	28	4·3	2·8	348	22	5·9	5·6	102	23	2·5	0·5	164	28	2·9	1·3	201	30	6·5	6·1	67	30	7·3	6·8	71
2·0 ,, ...	26	4·2	2·7	340	22	4·2	1·5	132	21	3·0	1·6	190	28	3·7	2·5	205	30	5·5	4·8	57	30	5·7	4·9	68
2·5 ,, ...	25	4·7	2·9	330	22	3·9	2·0	246	20	3·4	1·9	192	26	4·4	3·3	201	30	5·0	3·9	62	30	5·1	3·9	67
3·0 ,, ...	22	5·2	3·5	317	22	4·1	2·7	273	19	3·4	2·1	205	24	4·1	3·2	207	30	4·5	3·1	74	30	4·8	3·3	78
4·0 ,, ...	19	5·8	4·2	299	22	5·4	3·1	283	16	9·2	8·3	262	20	8·1	7·4	250	23	4·7	1·5	80	29	4·4	2·2	89
5·0 ,, ...	18	5·8	4·4	291	21	6·7	4·0	281	11	18·3	18·2	260	17	18·7	18·1	260	20	5·5	2·4	96	28	5·1	3·0	65
6·0 ,, ...	18	7·6	4·9	269	20	8·1	5·5	268	8	19·4	19·1	261	15	20·5	20·3	263	13	4·9	1·2	109	28	6·8	2·8	71
7·5 ,, ...	17	10·6	7·1	276	16	10·5	9·1	257	4	27·8	27·5	266	13	25·0	24·6	268	1	2·5	2·5	345	25	5·2	1·3	106
9·0 ,, ...	16	12·5	10·9	257	11	13·1	12·7	246					9	35·7	34·7	269					21	4·7	2·1	194

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

NOVEMBER 1950

STATION	GADAG				GAYA												GOPALPUR							
Time in I.S.T.	1430				0230				0730				1430				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·7	1·6	77	30	1·8	1·3	166	30	2·2	1·8	188	30	3·6	2·4	306	30	3·2	2·3	342	30	3·0	1·3	75
0·15 a.g. ...	30	3·7	3·1	71	30	4·5	3·3	282	30	3·9	3·1	254	30	4·9	3·6	307	28	6·2	5·5	343	26	4·3	3·2	72
0·6 a.s.l. ...					30	5·5	4·3	317	30	4·8	3·3	320	30	4·6	3·9	301	28	5·7	4·2	37	26	4·1	2·5	13
1·0 ,, ...	30	4·3	3·8	73	30	6·1	4·9	315	30	5·9	4·1	321	30	5·2	4·2	300	27	6·6	5·2	37	24	4·9	4·0	5
1·5 ,, ...	30	4·5	4·2	67	29	6·3	5·1	303	30	7·1	5·2	317	29	5·9	5·1	300	26	5·6	3·5	49	23	4·5	3·3	356
2·0 ,, ...	28	4·8	4·4	62	27	5·9	4·6	290	29	7·4	5·1	301	28	7·8	6·8	298	22	4·2	2·8	27	21	4·3	2·8	344
2·5 ,, ...	27	4·7	4·2	61	12	5·9	4·6	275	28	7·9	5·9	298	28	8·8	7·7	296	20	3·9	1·9	23	21	4·2	2·1	335
3·0 ,, ...	26	4·4	3·3	60	8	6·5	5·2	272	25	7·8	6·6	285	28	10·2	9·3	289	17	3·8	1·0	7	20	4·9	2·2	324
4·0 ,, ...	24	4·4	2·5	62	1	6·5	6·0	250	19	9·2	8·6	275	26	11·1	10·6	281	13	4·3	0·6	296	19	4·8	1·9	323
5·0 ,, ...	23	5·7	3·1	79					12	11·1	10·7	264	17	14·1	13·1	270	11	5·7	2·4	294	17	5·8	2·8	305
6·0 ,, ...	20	6·6	3·3	71					13	13·1	12·7	253	11	16·8	16·3	266	9	4·9	2·7	305	15	6·3	3·0	303
7·5 ,, ...	18	5·9	1·1	112					2	19·0	18·5	256	2	19·7	19·3	267	3	6·0	6·0	215	7	7·1	5·1	305
9·0 ,, ...	14	5·1	2·1	250													2	6·3	6·0	235	4	7·9	7·1	242

STATION	GORAKHPUR								HYDERABAD (Dn.)								JAGDALPUR			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	0·9	0·6	253	30	2·7	2·0	266	30	1·3	1·0	55	30	1·1	0·6	48	30	3·1	2·0	41	30	0·4	0·3	23
0·15 a.g. ...	30	4·4	3·3	294	30	3·9	3·1	278	30	6·7	5·7	79	30	5·2	4·2	66	30	5·1	3·9	53	28	4·8	4·3	40
0·6 a.s.l. ...	30	5·6	4·2	296	30	4·3	3·4	284	30	4·3	3·4	66	30	3·1	2·1	53	30	4·5	3·3	56	28	3·1	2·8	40
1·0 ,, ...	30	5·8	4·2	294	30	5·1	3·7	294	30	8·1	7·2	71	30	8·1	7·2	51	30	5·0	4·2	44	28	6·3	5·8	41
1·5 ,, ...	30	6·8	4·6	302	30	6·6	4·9	303	28	7·2	6·6	48	29	8·1	7·2	43	30	5·3	4·7	38	27	6·0	5·4	40
2·0 ,, ...	30	7·3	6·0	302	30	8·1	6·9	302	27	6·3	5·3	33	27	7·0	5·2	42	29	5·2	4·1	34	26	4·5	3·1	30
2·5 ,, ...	28	7·5	6·7	295	30	8·6	7·7	293	27	6·5	4·4	37	27	6·5	4·4	45	28	5·2	3·0	26	24	4·5	2·4	33
3·0 ,, ...	27	7·9	6·8	285	30	8·7	8·0	291	25	5·8	2·9	51	27	5·7	3·4	57	28	5·0	1·9	31	21	4·3	2·1	47
4·0 ,, ...	25	8·5	7·6	277	28	10·5	9·6	282	11	4·3	1·8	60	27	5·5	1·4	56	24	5·3	1·7	49	13	5·0	1·4	38
5·0 ,, ...	19	13·4	11·8	265	22	13·7	13·1	271	6	7·1	3·7	79	26	5·3	1·1	50	24	5·3	1·0	47	3	4·0	2·5	280
6·0 ,, ...	13	16·0	15·5	259	16	16·6	15·9	268					26	5·8	0·5	153	24	6·1	0·8	42	2	4·0	3·4	278
7·5 ,, ...	6	21·7	21·2	252	9	26·6	25·1	264					18	5·8	1·6	214	24	7·4	1·1	235				
9·0 ,, ...					2	35·5	35·5	240					11	7·9	6·5	221	23	7·1	4·1	235				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

NOVEMBER 1950

TATION	JAGDALPUR								JAMSHEDPUR								JHARSUGUDA							
ıe in I.S.T.	0730				1430				0730				1430				0230				0730			
ght in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
face ...	30	0·4	0·3	22	30	1·8	1·3	8	30	1·1	0·5	319	30	1·8	1·1	349	30	0·9	0·8	15	30	1·2	1·2	26
5 a. g. ...	29	3·4	2·8	31	30	3·9	3·0	17	28	2·3	1·7	284	29	2·9	1·7	350	29	4·5	4·1	29	30	4·8	4·5	33
a.s.l. ...	29	1·9	1·6	33	30	3·2	2·5	17	28	3·9	2·7	5	29	3·2	2·2	351	29	5·1	3·8	28	30	5·2	4·5	39
,, ...	27	6·6	6·1	48	30	4·4	3·7	26	26	5·1	4·0	4	28	3·6	2·7	340	28	4·9	3·1	26	29	5·8	4·4	30
,, ...	26	6·3	5·6	49	30	5·1	4·0	27	26	5·3	4·0	349	28	5·1	4·2	332	28	4·8	3·2	7	28	5·3	4·1	19
,, ...	23	4·9	3·8	41	25	4·3	2·0	18	25	5·0	3·9	321	28	6·3	5·6	316	26	4·4	3·3	336	28	4·7	3·1	352
,, ...	21	4·6	3·8	42	23	4·1	1·9	4	24	5·6	4·5	301	25	7·4	6·9	304	23	5·2	3·9	319	27	4·9	3·1	325
,, ...	20	4·1	2·7	44	22	4·5	1·6	348	22	6·8	5·4	287	25	8·4	7·8	297	22	5·5	3·5	303	25	5·6	3·6	308
,, ...	18	4·3	0·7	342	21	5·0	2·3	296	17	8·1	7·4	286	21	9·3	8·7	287	13	6·4	4·6	261	22	6·5	4·8	279
,, ...	18	4·6	1·2	271	20	6·0	2·7	293	11	7·7	6·3	262	19	10·2	9·3	279					21	8·2	6·6	277
,, ...	18	5·8	2·8	301	18	5·8	2·7	292	9	8·4	7·7	263	14	11·3	9·8	272					19	10·7	8·7	266
,, ...	16	8·1	4·5	249	15	7·0	4·2	252	1	12·0	12·0	225	4	16·0	15·3	249					12	12·5	11·3	254
,, ...	14	8·1	7·5	229	13	9·4	8·2	244					1	13·0	13·0	235					8	16·2	15·4	241

TATION	JHARSUGUDA				JODHPUR								JABALPUR							
ıe in I.S.T.	1430				0230				0730				1430				0230				0730			
ght in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
face ...	30	0·8	0·5	20	30	2·1	1·9	40	30	1·1	1·0	57	30	1·1	0·1	359	30	0·6	0·3	117	30	0·7	0·6	133
5 a. g. ...	29	2·8	2·0	9	30	5·7	2·7	75	30	4·5	3·3	90	25	2·4	0·9	352	30	3·5	2·8	56	30	2·7	1·1	67
a.s.l. ...	29	3·1	2·1	12	30	4·9	1·3	73	30	4·6	2·1	47	25	2·3	1·1	358	30	3·9	3·5	36	30	3·3	2·1	51
,, ...	29	3·7	2·3	17	30	4·0	0·5	32	30	3·5	0·8	359	24	2·3	1·4	3	30	4·8	3·8	15	30	5·4	4·7	28
,, ...	28	4·2	3·3	358	30	3·5	1·2	301	30	3·3	1·5	333	26	2·4	1·3	337	30	4·5	3·4	355	30	5·4	4·5	3
,, ...	28	5·3	4·0	334	30	3·2	2·3	289	30	3·6	2·0	318	27	3·5	1·8	311	30	4·1	3·1	319	30	4·8	3·9	336
,, ...	26	5·7	4·1	319	29	4·4	3·2	293	30	4·3	2·7	313	29	4·5	3·1	279	30	5·0	3·5	291	30	4·6	2·9	294
,, ...	26	6·0	4·3	302	27	5·7	4·6	280	30	5·2	3·7	307	30	6·0	5·2	274	26	5·5	3·4	269	30	5·5	3·5	269
,, ...	24	7·5	6·0	279	1	7·5	7·5	230	30	8·6	7·6	272	30	10·4	9·4	272	7	5·6	4·7	254	28	7·8	6·6	269
,, ...	21	9·5	7·9	284					28	12·6	11·4	268	29	13·7	12·4	270	4	8·1	6·9	241	28	10·4	9·5	270
,, ...	19	10·9	9·0	274					23	15·5	14·8	267	28	18·0	17·0	268	1	9·0	9·0	215	26	14·0	13·3	271
,, ...	16	15·7	13·6	261					9	19·5	18·5	268	18	24·1	22·7	270					15	16·0	15·0	261
,, ...	13	17·6	16·1	251					2	25·3	24·3	218	14	32·0	30·0	263					5	18·5	17·9	259

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

NOVEMBER 1950

STATION	JABALPUR				LUCKNOW				MADHOSAGAR										MADRAS		
Time in I.S.T.	1430				0730				0230				0730				1430			0230	
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	1·4	1·0	358	11	3·0	2·8	283	30	1·9	1·7	225	30	1·3	1·2	226	30	2·6	2·0	296	30	2·6	2·0
0·15 a.g. ...	30	2·9	2·1	5	11	7·9	7·8	305	29	3·9	2·7	319	30	4·4	3·3	306	30	3·8	3·4	307	29	5·8	4·2
0·6 a.s.l. ...	30	3·0	2·3	6	11	10·8	10·7	303	29	4·2	3·5	333	30	4·3	3·4	337	30	3·6	3·3	312	29	7·3	5·6
1·0 ,, ...	30	3·2	2·4	2	11	10·5	10·3	300	29	4·3	3·9	321	30	4·6	4·0	330	30	4·1	3·7	314	28	7·3	5·9
1·5 ,, ...	30	3·7	3·0	351	11	10·3	10·1	300	30	5·2	4·7	318	30	6·0	5·3	319	30	4·9	4·3	312	28	7·0	5·5
2·0 ,, ...	29	4·4	3·6	318	11	9·6	9·4	299	30	5·8	5·1	308	30	6·5	5·4	312	30	5·3	4·6	304	27	5·9	4·3
2·5 ,, ...	29	5·4	3·9	289	10	8·5	8·2	301	27	6·4	5·6	304	30	6·7	5·0	310	30	6·5	5·7	293	25	5·4	3·3
3·0 ,, ...	28	6·8	5·4	284	9	8·9	8·8	293	25	7·0	5·6	298	30	6·1	4·6	283	30	7·9	6·8	286	23	5·6	3·5
4·0 ,, ...	28	8·4	7·2	280	9	12·8	12·6	287	3	5·0	4·0	269	30	9·6	8·6	276	29	10·9	10·5	275	14	6·1	4·8
5·0 ,, ...	28	9·8	8·6	277	4	12·0	11·8	279	2	5·0	4·3	260	27	13·8	12·8	269	27	14·9	14·2	268			
6·0 ,, ...	27	10·6	9·7	276	2	18·5	18·5	270					24	19·1	18·0	266	24	18·1	17·1	267			
7·5 ,, ...	26	13·3	12·3	269									8	30·3	29·2	256	18	27·5	26·7	264			
9·0 ,, ...	23	18·0	17·2	268									1	24·0	24·0	260	3	36·5	36·4	245			

STATION	MADRAS								MALEGAON										MANGALORE		
Time in I.S.T.	0730				1430				0230				0730				1430			0230	
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	30	3·2	2·5	332	30	5·2	4·0	15	30	2·4	1·9	296	30	2·3	2·2	289	30	1·6	0·7	73	30	2·7	2·5
0·15 a.g. ...	30	6·1	4·3	360	30	7·6	5·8	22	30	3·8	3·1	64	30	2·5	1·3	59	30	2·7	1·4	57	30	3·6	2·5
0·6 a.s.l. ...	28	8·2	6·0	28	30	7·3	5·9	22	30	3·8	3·1	64	30	2·5	1·3	59	30	2·7	1·4	57	30	3·0	2·3
1·0 ,, ...	28	8·1	6·4	39	30	7·5	6·3	21	30	7·6	7·1	70	30	6·8	6·0	91	30	2·4	1·6	56	29	3·4	2·4
1·5 ,, ...	24	7·1	5·6	32	29	5·9	4·4	23	30	6·4	5·6	64	30	5·6	4·4	83	30	2·5	1·4	54	28	4·3	4·1
2·0 ,, ...	23	6·6	4·8	44	27	5·9	4·3	23	30	4·2	1·0	107	30	4·3	0·5	69	30	3·0	1·0	13	23	5·0	4·7
2·5 ,, ...	21	6·3	3·8	61	25	5·3	3·5	39	30	4·8	1·8	247	29	4·3	1·7	289	30	3·4	1·6	313	13	5·0	4·5
3·0 ,, ...	20	5·4	2·7	68	24	5·3	3·4	52	29	5·0	2·0	269	29	4·4	2·5	299	30	3·8	2·5	299	9	4·6	2·9
4·0 ,, ...	19	5·8	4·4	79	20	6·1	4·6	76	27	4·7	3·0	292	29	5·3	3·6	306	27	5·3	3·6	296			
5·0 ,, ...	16	7·2	5·3	85	15	6·5	5·0	85					28	7·0	4·7	286	27	6·4	5·1	279			
6·0 ,, ...	16	7·6	6·1	90	14	7·4	5·6	103					27	8·5	6·6	274	27	9·3	7·6	277			
7·5 ,, ...	12	5·5	3·8	71	8	5·8	3·7	116					24	11·4	9·2	263	23	12·5	11·5	259			
9·0 ,, ...	9	5·0	3·0	93	7	5·8	4·2	104					20	13·7	12·6	257	17	16·8	15·9	256			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

NOVEMBER 1950

STATION	MANGALORE								MASULIPATAM											NAGERCOIL			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	2·3	2·2	84	30	2·6	2·4	287	30	2·0	1·7	17	30	2·6	2·1	19	30	2·5	1·8	79	30	1·7	1·2	337
0·15 a.g. ...	29	3·6	2·7	72	30	3·5	2·8	286	30	5·4	4·0	52	30	5·4	4·5	42	30	4·5	2·9	72	28	4·2	2·6	330
0·6 a.s.l. ...	29	3·2	1·7	34	30	2·3	0·7	357	30	6·0	4·4	57	30	6·3	4·8	58	30	5·4	3·3	41	28	4·5	2·9	333
1·0 ,, ...	29	3·5	2·4	70	30	3·2	2·3	79	30	6·5	4·4	42	30	6·4	4·7	54	29	5·6	4·2	29	27	4·0	2·2	7
1·5 ,, ...	29	4·0	3·1	83	30	4·0	3·2	74	29	5·4	3·8	42	29	6·0	4·1	50	27	5·1	3·8	26	27	4·1	2·5	29
2·0 ,, ...	28	4·0	3·5	74	28	4·6	3·9	74	27	5·1	3·4	41	29	5·9	4·1	60	27	5·3	3·4	30	24	4·3	3·2	39
2·5 ,, ...	28	4·5	3·5	68	27	4·5	3·4	18	21	4·8	2·3	49	28	6·1	4·4	59	27	5·5	2·8	34	22	4·4	2·1	23
3·0 ,, ...	26	4·4	3·4	72	26	5·4	4·0	78	18	5·2	2·4	75	27	6·0	4·2	68	27	5·2	2·4	43	18	5·8	2·4	34
4·0 ,, ...	21	5·4	4·1	70	24	5·1	4·2	76	13	5·3	3·4	85	23	5·8	3·8	69	25	5·3	2·8	81	5	6·7	6·6	87
5·0 ,, ...	17	6·3	5·1	78	21	5·8	4·7	79					22	5·9	4·5	71	23	5·2	2·2	84				
6·0 ,, ...	12	6·7	5·7	79	17	7·1	5·2	73					19	6·5	4·1	73	21	6·4	4·1	79				
7·5 ,, ...	8	3·5	2·5	96	10	5·3	2·9	118					17	5·9	1·9	92	19	7·2	4·0	82				
9·0 ,, ...	8	4·9	3·1	65	5	2·6	0·3	72					15	5·0	0·5	95	12	6·5	3·0	136				

STATION	NAGERCOIL								NAGPUR											NEW DELHI			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	1·4	0·8	351	30	2·9	2·0	245	30	1·9	1·5	356	30	1·4	1·1	13	30	1·7	1·5	39	30	2·0	1·8	290
0·15 a.g. ...	29	3·8	2·1	4	29	4·7	3·3	241	30	6·1	5·5	46	30	5·6	5·4	33	29	3·3	2·9	40	30	6·4	6·0	324
0·6 a.s.l. ...	29	4·0	2·4	10	29	4·1	2·2	269	30	6·4	5·9	59	30	6·9	6·6	61	29	3·3	3·0	40	30	6·3	6·0	324
1·0 ,, ...	29	4·3	2·5	18	29	3·6	1·3	331	30	5·7	4·9	55	30	5·7	5·4	60	29	3·3	2·9	35	30	6·6	6·3	313
1·5 ,, ...	28	4·0	2·1	27	28	3·8	2·9	2	30	4·8	3·7	25	30	5·3	4·2	30	30	3·7	3·1	16	30	7·1	6·6	308
2·0 ,, ...	27	4·1	2·6	55	26	5·4	4·1	1	30	4·7	3·1	344	30	5·3	3·6	357	30	3·9	3·1	356	30	7·1	6·3	305
2·5 ,, ...	26	4·9	2·5	48	23	5·5	4·1	354	29	4·5	2·3	331	30	4·9	3·0	344	30	4·5	2·8	321	27	8·0	7·1	303
3·0 ,, ...	26	5·4	2·0	38	19	5·6	3·2	357	27	4·3	2·3	310	29	4·6	1·9	303	30	4·9	3·0	302	25	7·5	6·9	290
4·0 ,, ...	24	5·3	2·2	91	13	6·0	2·3	20	13	6·4	4·9	260	28	6·4	3·7	270	28	6·7	4·8	271	2	3·7	3·5	252
5·0 ,, ...	20	5·7	3·5	93	10	6·3	4·6	57	5	7·7	5·3	266	27	7·6	5·4	275	28	7·4	6·1	270				
6·0 ,, ...	15	5·6	3·4	59	10	7·9	5·3	66	2	8·5	8·3	277	22	8·7	6·4	265	29	9·0	7·2	265				
7·5 ,, ...	11	6·1	4·7	78	8	9·5	7·9	73					17	11·1	8·3	249	29	12·8	10·7	261				
9·0 ,, ...	5	8·2	8·0	104	4	8·1	7·5	81					10	12·4	11·0	235	26	17·1	15·1	256				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

NOVEMBER 1950

STATION	NEW DELHI								POONA												PORT BLAIR			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	2·3	2·2	278	30	3·8	3·6	317	30	0·4	0·2	221	30	0·2	0·2	221	30	1·4	0·7	88	30	2·5	1·8	83
0·15 a. g. ...	30	5·2	4·9	306	30	4·6	4·4	311	30	3·0	1·8	56	30	2·5	1·6	114	30	2·6	1·6	56	30	5·3	3·5	81
0·6 a.s.l. ...	30	6·3	5·7	318	30	4·8	4·4	308	30	1·9	0·7	229	30	1·6	0·8	193	30	2·0	1·0	57	30	5·7	4·1	86
1·0 ,, ...	30	7·0	6·3	311	30	5·3	4·9	305	30	5·6	4·8	65	30	6·7	6·5	93	30	2·4	1·7	76	26	4·9	3·6	81
1·5 ,, ...	30	7·8	7·0	313	30	6·6	6·0	308	30	6·1	5·5	77	30	7·2	6·9	97	30	2·8	1·8	88	21	5·0	3·7	76
2·0 ,, ...	30	7·2	6·2	314	30	6·9	5·9	303	30	4·5	3·9	96	30	4·8	3·7	102	30	3·2	1·4	88	18	5·5	4·6	75
2·5 ,, ...	30	7·2	5·9	306	30	7·2	6·2	294	29	3·8	0·9	122	30	3·5	0·6	68	30	3·5	0·9	58	15	5·5	4·3	64
3·0 ,, ...	30	7·0	6·1	289	30	7·5	6·9	288	27	4·1	1·5	254	30	4·1	0·5	305	28	4·1	0·6	345	13	5·5	4·8	61
4·0 ,, ...	30	9·2	8·3	273	30	10·4	9·7	276	17	5·1	3·0	297	29	4·8	2·1	324	26	4·4	0·9	298	2	8·0	6·9	105
5·0 ,, ...	21	14·4	13·2	265	30	13·7	12·6	273	5	5·4	3·5	319	26	4·8	1·2	297	26	5·1	2·7	290				
6·0 ,, ...	18	17·1	16·2	267	28	18·4	17·5	270	2	4·7	4·7	298	26	5·7	2·8	290	26	6·7	3·7	284				
7·5 ,, ...	8	20·7	20·1	261	23	24·8	23·9	267	1	3·0	3·0	240	22	8·3	6·4	267	23	8·5	5·8	260				
9·0 ,, ...	1	23·5	23·5	240	17	33·2	31·4	262					13	10·3	10·1	244	21	10·8	10·0	253				

STATION	PORT BLAIR								RAIPUR												TEZPUR			
Time in I.S.T.	0730				1430				0230				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	30	2·1	1·7	96	30	2·7	2·2	81	30	1·5	1·4	4	30	1·2	1·0	14	30	1·8	1·5	30	30	0·5	0·3	87
0·15 a. g. ...	30	5·1	3·7	82	30	5·4	4·1	80	29	5·5	4·8	36	30	5·0	4·7	37	29	3·1	2·5	24	21	3·3	2·1	73
0·6 a.s.l. ...	30	6·4	4·9	85	30	6·0	4·6	77	29	5·3	4·8	41	30	5·9	5·5	47	30	3·1	2·7	26	21	3·7	0·7	113
1·0 ,, ...	30	6·3	4·9	87	28	5·9	4·4	80	30	4·5	3·8	35	30	5·5	4·9	43	30	3·4	2·9	28	19	3·5	0·5	135
1·5 ,, ...	26	6·4	5·1	86	25	5·4	4·3	89	28	4·6	3·6	28	29	6·0	4·9	29	30	4·1	3·3	18	16	3·8	0·3	104
2·0 ,, ...	24	5·9	4·8	87	23	5·4	4·6	85	26	4·0	2·9	21	29	5·1	3·6	23	30	4·3	3·4	359	15	4·5	0·5	241
2·5 ,, ...	23	6·1	4·5	96	20	5·6	4·9	80	21	3·7	2·8	344	28	4·6	2·6	356	28	4·7	3·0	333	11	6·7	0·1	259
3·0 ,, ...	21	6·1	4·5	85	20	6·2	5·0	73	18	3·9	2·7	316	27	4·1	2·3	330	25	5·1	2·9	314	10	5·0	1·7	265
4·0 ,, ...	16	6·2	4·6	86	19	7·0	6·2	75	5	7·5	4·1	267	24	5·7	3·3	271	22	6·6	4·3	284	4	6·5	4·7	265
5·0 ,, ...	13	6·6	6·0	81	16	7·9	7·3	76	2	7·3	6·2	219	23	6·4	4·4	269	20	7·9	6·1	282				
6·0 ,, ...	10	7·6	7·3	89	14	8·1	7·9	87					20	9·0	6·7	268	19	9·1	7·4	281				
7·5 ,, ...	10	7·1	6·7	88	11	7·8	6·9	91					18	13·6	11·2	257	18	13·2	11·4	266				
9·0 ,, ...	4	9·4	9·3	104	10	7·1	6·5	108					13	17·2	16·1	249	13	14·5	13·3	254				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

NOVEMBER 1950

TATION	TEZPUR								TIRUCHIRAPALLI												TRIVANDRUM			
e in I.S.T.	0730				1430				0230				0730				1430				0730			
ght in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ce ...	30	0 7	0·6	67	30	0·8	0·5	72	30	1·9	1·4	37	30	1·6	1·1	5	30	2·7	1·7	17	30	0·5	0·4	5
a.g. ...	26	2·9	2·1	70	29	2·7	1·1	82	28	6·7	4·9	43	28	4·6	3·1	355	30	3·9	2·5	39	30	3·0	1·9	7
.s l. ...	26	3·7	2·3	93	29	3·2	1·3	101	28	7·8	6·0	44	28	6·0	4·0	17	29	4·5	3·6	32	29	3·0	1·9	319
,, ...	25	3·9	1·7	84	29	3·4	1·3	148	28	6·0	4·4	32	27	6·1	4·4	22	29	5·0	4·1	29	29	3·1	1·8	353
,, ...	25	4·2	0·7	105	28	4·1	1·5	176	28	5·6	3·8	1	26	5·8	4·5	11	29	5·2	4·2	23	28	3·7	1·7	27
,, ...	25	4·8	0·8	150	26	4·8	1·8	210	27	5·5	3·7	11	26	5·2	4·0	18	28	5·7	4·0	31	26	3·9	2·3	54
,, ...	24	5·4	0·8	212	26	5·3	1·5	254	24	4·4	2·8	19	24	5·0	3·1	38	28	5·8	3·0	44	21	4·3	2·2	51
,, ...	23	5·7	2·4	271	23	5·9	3·7	277	23	4·9	2·9	48	23	6·2	4·2	70	27	5·4	3·1	66	19	5·2	2·5	58
,, ...	22	13·1	11·9	269	22	14·0	13·7	269	4	3·0	2·0	20	20	6·1	4·7	103	26	5·6	3·5	73	16	5·7	3·7	91
,, ...	17	18·1	17·7	269	20	20·6	20·2	271					19	6·9	5·3	89	23	7·0	5·6	83	12	5·8	5·4	82
,, ...	11	18·7	18·5	267	19	22·8	22·4	269					17	7·0	5·7	79	21	7·1	6·5	87	11	6·4	5·9	80
,, ...	8	23·5	23·0	269	12	26·8	26·0	269					10	7·1	6·4	87	15	8·1	6·2	79	10	6·5	5·8	85
,, ...	2	34·5	32·0	282	10	33·2	31·7	268					6	6·2	5·6	102	11	8·5	7·6	115	4	7·4	7·2	77

ATION	UDAIPUR												VENGURLA											
in I.S.T.	0230				0730				1430				0230				0730				1430			
ght in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ce ...	30	0·4	0·3	299	30	0·3	0·2	305	30	1·2	0·6	69	30	1·1	0·9	15	30	0·9	0·7	45	30	2·9	2·3	259
a.g. ...	30	2·1	1·4	42	30	1·9	1·1	8	28	1·8	1·1	64	30	3·8	3·0	31	30	3·1	2·5	73	30	3·1	2·6	253
.s.l. ...													30	4·5	2·9	20	30	4·6	3·2	79	30	2·0	0·9	47
,, ...	30	3·3	2·0	74	30	3·2	2·1	77	28	1·9	1·1	64	20	5·6	3·2	51	30	5·3	4·1	81	30	3·9	3·4	61
,, ...	30	3·0	1·3	69	30	3·4	1·6	68	28	2·4	0·9	15	30	6·0	4·9	72	30	5·3	4·4	84	30	5·7	5·4	69
,, ...	30	3·7	0·8	18	30	3·7	1·1	15	28	2·9	1·2	323	30	6·4	5·9	80	30	5·0	4·1	84	30	5·3	4·7	66
,, ...	30	4·5	2·1	308	30	4·6	2·4	331	30	3·8	2·5	295	30	5·5	4·8	85	30	4·3	3·5	88	30	4·7	3·7	62
,, ...	30	5·3	4·1	294	30	5·7	3·4	307	30	5·6	4·6	284	27	4·0	3·1	87	29	4·7	3·0	85	30	4·8	3·2	69
,, ...	8	7·4	6·3	276	30	8·3	7·5	275	30	9·4	8·5	276	23	4·8	0·9	99	27	4·9	1·3	67	29	4·9	2·4	67
,, ...	4	9·9	8·5	260	30	11·9	11·0	264	30	12·7	11·8	270	13	5·0	1·1	97	26	5·5	2·6	55	29	5·0	1·8	82
,, ...	2	13·0	12·6	277	25	15·1	14·3	264	30	16·7	15·8	268	11	4·6	0·7	357	25	6·5	2·5	55	30	6·0	2·3	52
,, ...					9	21·4	20·3	264	29	24·0	22·7	265	6	4·4	2·2	309	17	5·2	0·7	174	27	6·2	0·7	127
,, ...									19	30·0	28·7	260					15	6·3	3·9	223	25	6·1	3·0	245

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

NOVEMBER 1950

STATION	VERAVAL												VISAKHAPATNAM											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D				
Surface ...	30	2·4	2·3	34	30	2·5	2·3	44	30	3·4	2·2	243	30	0·9	0·8	12	28	1·5	1·0	340	30	4·0	2·7	74
0·15 a. g. ...	30	5·7	5·0	44	30	8·0	7·5	50	30	4·7	2·8	223	28	3·4	2·9	42	28	2·8	2·0	28	29	4·9	3·5	93
0·6 a.s.l. ...	30	5·5	5·0	65	30	5·8	5·4	59	30	3·2	1·6	33	28	5·0	3·7	52	28	4·9	3·6	46	29	4·5	3·0	39
1·0	30	5·4	5·0	67	30	4·8	4·3	60	30	3·8	3·3	41	27	5·2	4·1	39	28	5·7	4·2	45	28	5·7	4·2	35
1·5	30	4·8	3·9	66	30	4·2	3·0	56	30	4·6	4·2	43	25	4·7	3·5	38	27	5·0	3·6	46	28	6·0	4·0	23
2·0	30	4·0	2·3	68	30	4·2	1·9	56	30	4·2	2·9	33	18	3·8	2·5	38	25	3·5	2·0	46	27	5·0	2·7	17
2·5	27	3·6	0·4	288	30	4·0	0·7	322	30	3·9	1·6	337	12	3·5	1·6	14	25	3·7	1·7	52	25	4·5	1·9	17
3·0	27	3·8	1·8	278	30	3·7	1·3	279	30	4·1	2·1	289	9	5·2	3·9½	14	25	4·4	1·9	67	23	4·4	2·1	33
4·0	14	5·1	3·4	248	30	5·3	3·9	281	30	5·2	4·1	279	5	5·7	5·4	29	22	4·7	1·6	65	19	5·0	1·4	14
5·0					30	7·5	6·8	282	30	7·8	7·0	277					17	4·7	1·5	76	17	5·4	1·9	22
6·0					29	10·8	10·0	272	30	10·7	9·4	270					11	4·2	1·5	51	16	5·8	1·2	61
7·5					26	16·0	15·2	264	26	16·3	15·1	263					6	4·0	1·4	206	12	6·2	0·1	192
9·0					17	19·9	19·0	258	19	21·0	19·8	261					5	6·0	4·7	254	9	6·3	1·8	263

STATION																								
Time in I.S.T.																								
Height in Km.																								
Surface ...																								
0·15 a. g. ...																								
0·6 a.s.l. ...																								
1·0																								
1·5																								
2·0																								
2·5																								
3·0																								
4·0																								
5·0																								
6·0																								
7·5																								
9·0																								

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

NOVEMBER 1950

n	V	v	D	Height in Km.
	AHMEDABAD			
40	30·6	29·4	251	11
19	35·6	34·3	247	12
8	38·3	36·9	237	13
2	30·0	29·5	237	14
1	22·0	22·0	255	15
	ALLAHABAD			
13	33·3	31·6	259	10
6	35·3	34·4	250	11
1	38·0	38·0	225	12
	AMBALA			
5	31·6	29·2	250	10
1	42·0	42·0	220	11
	ANANTAPUR			12
16	5·7	3·9	144	13
12	6·2	4·1	156	
9	6·8	4·5	160	10
5	9·0	7·9	161	11
4	11·4	7·5	154	12
3	8·8	4·4	156	13
2	11·7	3·3	136	14
1	12·0	12·0	85	15
1	15·5	15·5	85	16
	ASANSOL			17
8	22·7	20·0	247	
5	25·8	25·2	250	
1	25·0	25·0	240	10
1	27·5	27·5	245	11
1	27·0	27·0	230	12
1	35·5	35·5	230	13
	BANGALORE			14
20	9·0	5·8	186	15
8	12·7	10·7	134	16
5	13·8	11·4	135	17
4	7·1	5·5	165	18
3	8·2	7·4	107	19
3	12·5	12·3	102	
1	16·5	16·5	85	
	BHOPAL			10
7	28·8	28·2	250	11
1	24·9	24·0	250	12
1	24·5	24·5	250	13
	BHUJ			14
42	31·3	30·4	257	15
				16

n	V	v	D	Height in Km.
	BHUJ *(Contd.)*			
17	36·2	35·3	254	17
8	33·1	32·8	252	18
4	37·1	36·6	263	19
1	39·0	39·0	270	20
1	48·0	48·0	265	21
	BIKANER			22
7	29·8	28·7	252	23
1	19·5	19·5	225	
1	28·5	28·5	225	10
	BOMBAY			11
24	15·2	14·9	246	12
5	16·4	16·0	230	13
3	16·8	16·4	209	14
1	20·0	20·0	200	15
	CALCUTTA			
13	21·6	19·5	266	10
6	21·4	20·8	266	11
5	23·8	22·4	263	12
3	28·3	27·1	263	13
2	28·5	28·5	252	14
1	28·5	28·5	250	15
1	32·0	32·0	240	16
1	29·5	29·5	250	17
	COCHIN (Willingdon Island)			
10	9·5	9 0	127	10
7	14·0	13·7	118	11
7	16·9	15·6	112	12
4	10·4	7·7	128	13
3	9·3	3·1	150	14
3	6·3	2·9	69	15
1	6·5	6·5	80	16
1	11·5	11·5	90	17
1	7·5	7·5	100	18
1	5·0	5·0	5	19
	CUTTACK			
20	13·5	12·9	253	10
16	16·6	16·1	246	11
15	18·9	18·6	239	12
15	22·0	21·8	233	13
15	21·9	21·0	228	14
14	20·1	18·9	232	15
11	16·5	15·6	223	16

n	V	v	D	Height in Km.
	CUTTACK *(Contd.)*			
9	9·7	8·7	228	17
8	6·3	4·3	235	18
4	5·3	4·5	253	19
4	5·1	3·9	235	20
3	8·8	8·3	224	21
2	8·3	7·8	244	22
1	12·5	12·5	235	23
	DEOLALI			
7	15·1	15·0	244	10
5	15·5	15·1	234	11
3	17·8	16·6	221	12
1	13·0	13·0	235	13
1	5·5	5·5	295	14
1	12·0	12·0	110	15
	DIBRUGARH			
6	41·3	40·4	267	10
3	43·5	43·5	271	11
2	44·3	44·3	262	12
1	49·5	49·5	255	13
	GADAG			
30	4·2	3·2	264	10
13	11·4	11·1	98	11
5	14·7	14·3	175	12
4	12·6	10·9	172	13
1	14·5	14·5	180	14
1	13·0	13·0	215	15
1	7·0	7·0	205	16
	GOPALPUR			
5	9·2	8·8	230	10
4	11·1	10·9	229	11
4	15·2	15·2	223	12
4	19·5	18·8	213	13
4	20·7	20·0	226	14
3	13·8	13·6	225	15
2	19·0	18·5	219	16
1	24·5	24·5	225	17
1	22·0	22·0	215	18
	HYDERABAD (Dn.)			
29	8·4	5·7	223	10
20	11·8	10·2	205	11
16	12·1	10·4	209	12
10	11·7	10·4	214	13
6	9·3	7·7	213	14

n	V	v	D	Height in Km.
	HYDERABAD(Dn.) *(Contd.)*			
4	12·2	11·7	224	15
2	13·0	7·1	189	16
2	12·7	4·5	188	17
	JAGDALPUR			
25	9·4	8·8	233	10
17	12·2	12·1	222	11
12	14·9	14·7	211	12
7	17·0	16·8	203	13
4	16·6	16·6	199	14
4	16·3	15·6	205	15
4	12·5	11·5	192	16
	JAMSHEDPUR			
1	17·0	17·0	230	10
	JHARSUGUDA			
16	19·6	17·8	246	10
2	22·7	22·7	222	11
1	25·5	25·5	230	12
	JODHPUR			
10	34·5	31·3	266	10
7	39·1	36·9	260	11
2	49·5	48·3	266	12
2	62·0	60·0	269	13
1	63·0	63·0	285	14
1	69·5	69·5	290	15
	JABALPUR			
10	22·6	21·4	256	10
3	22·5	22·4	257	11
3	24·7	24·3	254	12
1	25·0	25·0	210	13
1	24·5	24·5	210	14
	MADHOSAGAR			
2	30·0	29·5	239	10
	MADRAS			
12	8·6	6·3	108	10
3	9·3	9·2	119	11
3	13·2	12·7	138	12
2	11·5	9·9	197	13
2	11·0	10·5	173	14
2	7·5	7·3	142	15
1	5·0	5·0	110	16
	MALEGAON			
34	17·8	17·4	247	10
9	21·3	20·9	249	11

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

NOVEMBER 1950

Height in Km.	n	V	v	D
	MALEGAON *(Contd.)*			
12	6	24·2	23·8	231
13	4	20·7	20·0	230
14	3	16·8	16·4	235
15	2	16·3	16·3	244
16	2	13·5	13·5	239
17	2	12·5	11·9	247
18	1	6·5	6·5	250
	MANGALORE			
10	9	5·8	4·5	139
11	4	9·7	9·7	152
12	3	14·7	14·7	157
13	3	15·5	15·3	146
14	2	11·0	11·0	153
15	1	4·0	4·0	170
	MASULIPATAM			
10	22	5·5	3 6	186
11	9	8·0	6·5	179
12	7	11·0	8·9	184
13	5	13·8	13·2	189
14	3	15·0	13·4	181
15	1	9·0	9·0	205
16	1	9·5	9·5	240
17	1	6·0	6·0	285
18	1	3·0	3·0	25
	NAGERCOIL			
10	8	10·6	9·7	105
11	1	19·0	19·0	115
	NAGPUR			
10	28	17·7	17·5	256
11	19	19·3	18·5	242
12	13	22·0	21·2	228
13	7	23·4	22·3	234
14	4	16·9	16·7	240
15	2	16·5	16·5	225
16	1	11·0	11·0	235
	NEW DELHI			
10	9	45·2	43·4	258
11	4	61·0	56·6	248
12	1	67·0	67·0	315
13	1	73·0	73·0	315
	POONA			
10	27	12·5	12·1	240
11	15	13·9	13·4	233

Height in Km.	n	V	v	D
	POONA *(Contd.)*			
12	11	15·7	15·1	224
13	8	14·0	13·1	226
14	6	11·9	11·5	228
15	4	10·4	10·1	235
16	2	5·0	5·0	214
17	2	7·0	5·7	191
	PORT BLAIR			
10	14	10·5	10·0	104
11	8	10·9	9·7	112
12	7	11·5	11·0	126
13	6	13·7	13·4	119
14	2	17·7	17·6	113
15	2	21·7	20·7	103
16	2	35·0	34·3	108
17	1	20·0	20·0	95
18	1	13·0	13·0	95
19	1	12·0	12·0	110
20	1	18·0	18·0	110
21	1	25·5	25·5	105
22	1	30·5	30·5	95
23	1	30·0	30·0	100
24	1	36·0	36·0	105
25	1	38·5	38·5	100
	RAIPUR			
10	21	18·6	17·7	249
11	7	21·1	20·7	250
12	3	21·5	21·5	240
13	1	32·5	32·5	240
	TEZPUR			
10	8	34·9	34·0	268
11	3	36·3	36·3	265
12	2	33·0	33·0	263
	TIRUCHIRAPALLI			
10	14	10·8	9·9	126
11	4	14·4	12·7	115
12	1	15·5	15·5	120
13	1	24·0	24·0	110
	TRIVANDRUM			
10	2	6·7	6·7	63
11	2	12·7	12·1	93
12	2	14·7	14·7	100
13	2	15·5	15·5	104
14	1	24·0	24·0	100

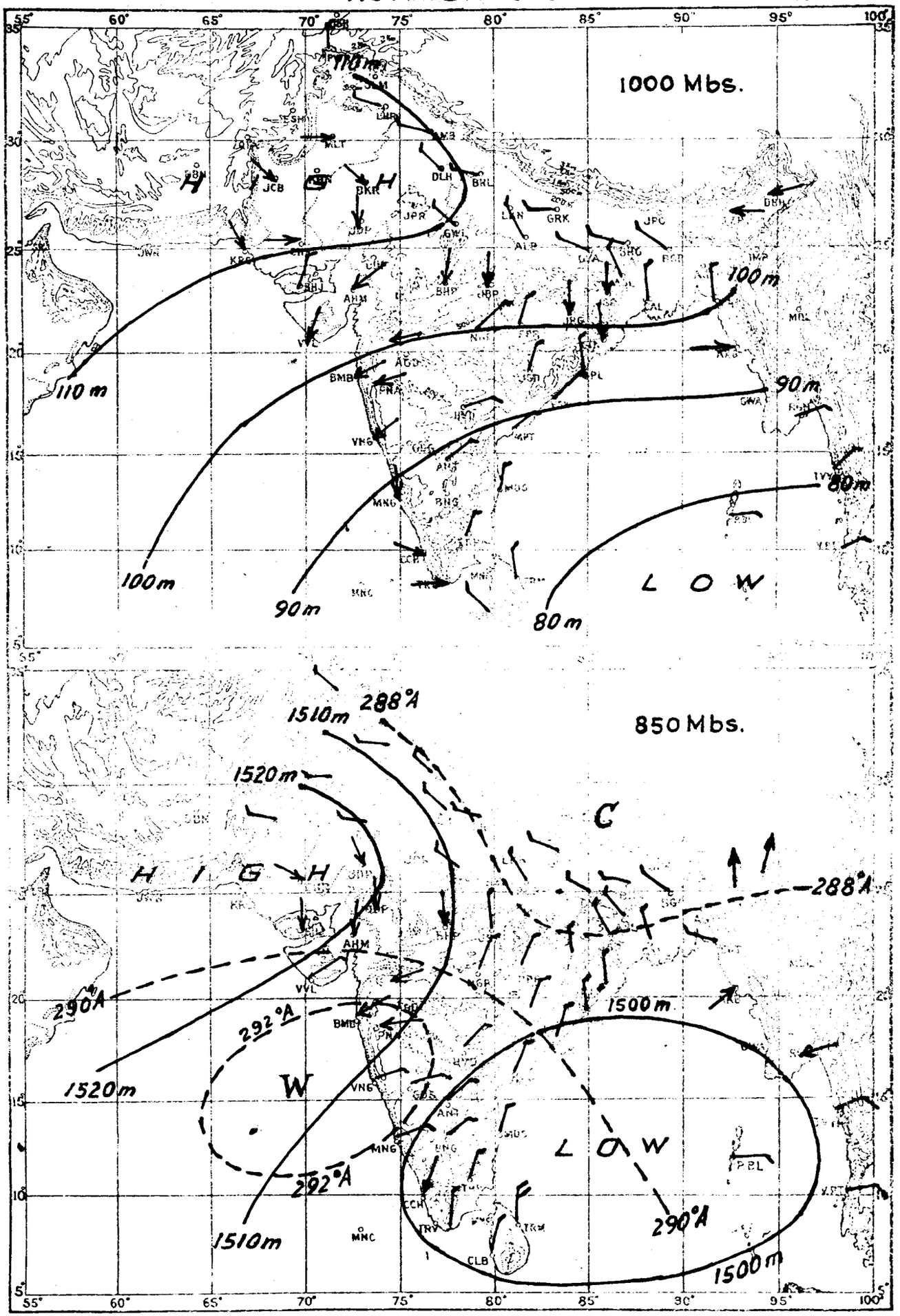
Height in Km.	n	V	v	D
	TRIVANDRUM *(Contd.)*			
15	1	23·0	23·0	100
16	1	22·5	22·5	110
17	1	11·5	11·5	90
18	1	7·5	7·5	100
19	1	5·0	5·0	5
	UDAIPUR			
10	8	31·7	30·3	255
11	1	57·0	56·8	141
	VENGURLA			
10	38	6·9	5·7	214
11	29	10·9	9·3	188
12	24	12·6	10·4	205
13	20	12·5	11·4	190
14	15	13·1	12·4	189
15	11	14·5	13·3	190
16	8	15·1	14·3	177
17	2	12·7	12·7	200
18	1	21·0	21·0	205
19	1	18·0	18·0	225
20	1	24·0	24·0	240
21	1	26·0	26·0	250
22	1	25·0	25·0	235
23	1	30·0	30·0	230
	VERAVAL			
10	27	22·1	20·7	253
11	11	24·8	24·1	247
12	5	24·9	24·0	244
13	1	28·0	28·0	215
	VISAKHAPATNAM			
10	11	7·2	6·8	219
11	4	8·6	8·3	214
12	4	12·3	12·1	196
13	4	14·4	14·2	185
14	4	12·1	12·1	182
15	3	8·7	7·9	191
16	2	14·7	13·7	182

Height in Km.	n	V	v

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

NOVEMBER 1950

Plate I



RESULTANT WIND ——\= 5 Knots; ——\= 10 Knots; ——\= 50 Knots.

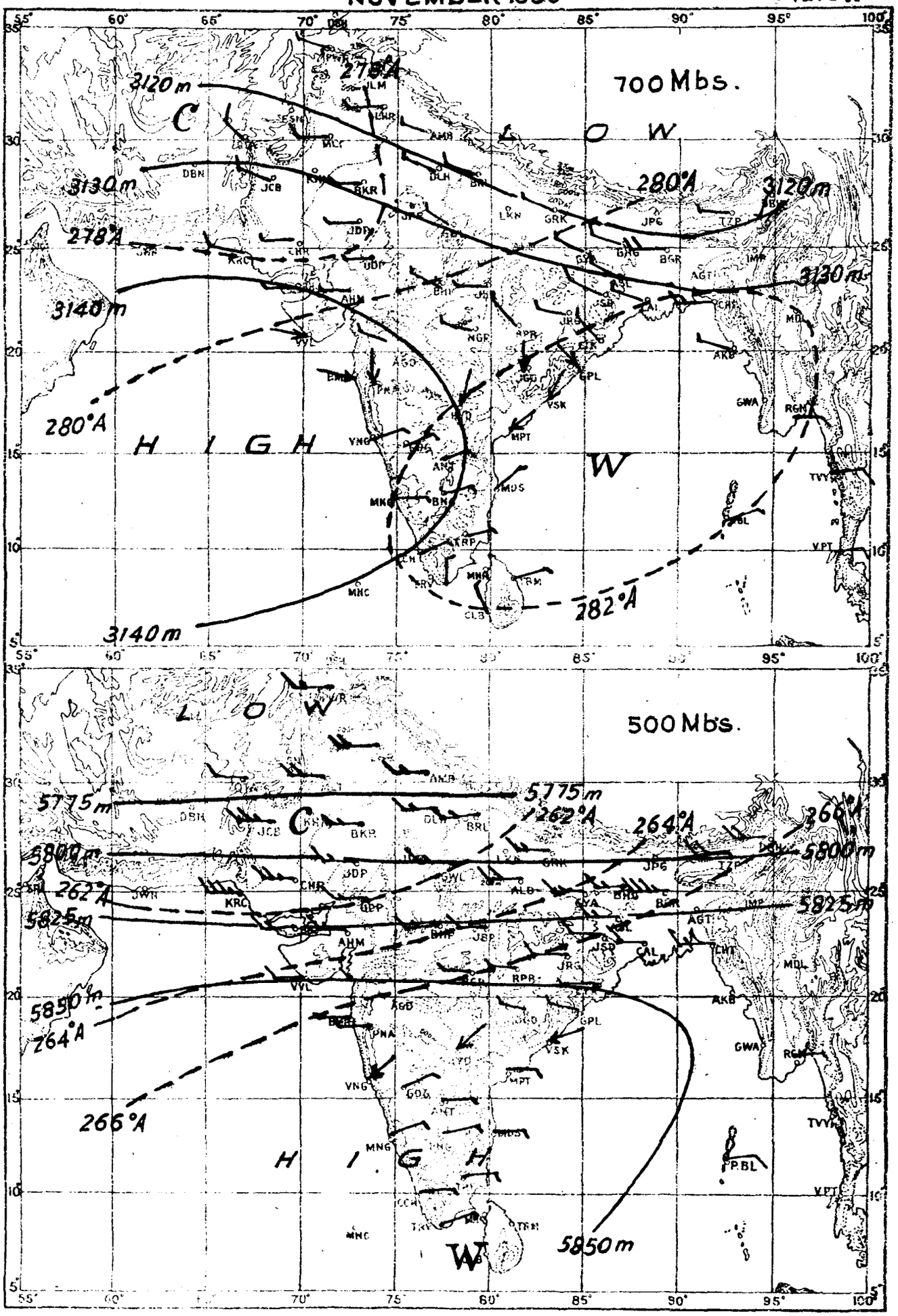
------ Isotherms in degrees absolute. ——— Contours in geopotential metres.

G.P.Z. POONA, 55.

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

NOVEMBER 1950

Plate II



RESULTANT WIND ——= 5 Knots; ——= 10 Knots; ——= 50 Knots.

– – – – – Isotherms in degrees absolute. ——— Contours in geopotential metres.

G.P.Z., P.POONA, 53.

Registered No. B-3097

INDIA WEATHER REVIEW, 1950

MONTHLY WEATHER REPORT

DECEMBER

Published by authority of the Government of India

CHIEF FEATURES—(i) Weak northeast monsoon in the south of the Peninsula, (ii) formation and movement of a cyclonic storm in the Bay of Bengal and (iii) unusually cold nights over most of the country in the first half of the month and over northwest India, Saurashtra and Kutch and Western Pakistan during the second half of the month.

The seasonal trough of low pressure in the south Bay of Bengal became well-marked on the 1st December and concentrated into a depression with its centre near Lat. 8° N., Long. 85½° E. on the 2nd morning. The depression intensified into a cyclonic storm by the morning of the 4th, when it was centred about 270 miles westnorthwest of Port Blair. Moving northwestwards, the storm weakened rapidly after the 5th evening and became unimportant off the Arakan coast by the morning of the 7th. In association with this storm the Andaman Islands experienced an unusual wet spell throughout the first week. S. S. Jalavijaya, which was near Lat. 12° N., Long. 90° E., experienced winds of gale force continuously for about 30 hours from the evening of the 3rd.

The northeast monsoon which had weakened in the east coast of the Peninsula after the 16th November continued weak during December also. In association with a low pressure wave moving westwards across the extreme south of the Peninsula, the northeast monsoon revived temporarily between the 12th and 14th, when it gave widespread and locally heavy rain in south Tamilnad and fairly widespread rain in north Tamilnad and Travancore-Cochin. According to newspaper reports, the persistent feebleness of the northeast monsoon throughout December seriously affected the crops in the Madras State.

Four western disturbances affected the country during the month. The first two moved across the extreme north of the country during the first forthnight, without causing any appreciable precipitation. The third disturbance moved through the Punjab(P) and the Punjab(I) in the beginning of the third week and was also feeble. It however induced a secondary over east Rajasthan on the 18th which moved eastwards and passed away across east Uttar Pradesh by the 20th. It however, left a residual trough of low pressure extending from east Uttar Pradesh to Gujarat, which concentrated into a closed "low" over south Gujarat on the 24th. The "low" moved northeastwards upto east Uttar Pradesh, causing widespread thundershowers in west Madhya Pradesh and Vindhya Pradesh between the 24th and 27th and in east Uttar Pradesh on the 24th and 25th. The last western disturbance of the month rapidly moved across the North-West Frontier Province and Kashmir on the 27th and 28th but did not produce any precipitation.

The indraught of cold air from northern latitudes into India and Western Pakistan which had started in the middle of November persisted in the earlier part of December also in association with the cyclonic storm in the Bay of Bengal. Consequently most of the country continued to experience unusually cold weather during the first fortnight of December. Later, the secondary western disturbance, which formed over east Rajasthan and moved upto east Uttar Pradesh, caused a surge of very cold air in its rear. This caused abnormally low temperatures over Western Pakistan, northwest India, Saurashtra and Kutch and north Gujarat during the second half of December. The temperatures dropped to freezing point or very near, in north Rajasthan and the Punjab (P) between the 19th and 20th December and again between the 25th and 26th.

The total rainfall for the month was in large excess in east Uttar Pradesh, Madhya Bharat, Vindhya Pradesh and west Madhya Pradesh, in slight excess in west Uttar Pradesh, in slight to moderate defect in the Bay Islands and Deccan (Desh)

Price Re. 1.

STATION	Height of bar, cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Bay Islands																					
Port Blair ...	259	1004·4	+0·2	1002·1	83·6	0	87	31	73·0	+0·1	67	17,21	80·7	77·0	73·9	72·1	25·2	−1·4	24·5	72	+1
Assam																					
Dibrugarh ...	348	1005·5	−0·8	1002·0	72·9	−1·1	79	2	55·4	+4·3	50	30	63·7	64·4	61·1	61·8	17·3	+2·1	17·8	86	−5
Sibsagar ...	317	1006·9	−0·6	1003·2	72·8	+0·6	79	3	54·9	+4·0	50	4	63·5	64·7	61·0	62·2	17·2	+1·7	18·0	87	−7
Tezpur ...	258	1009·0	−0·7	1004·5	77·0	+1·8	86	6 days	56·5	+2·4	51	31	62·4	67·5	60·5	63·5	17·0	+1·5	18·2	89	+1
Gauhati ...	182	1011·4	−0·3	1006·0	76·7	+1·1	81	7	55·1	+2·4	53	10 days	62·1	68·1	59·9	63·1	16·9	+0·9	17·5	87	−2
Dhubri ...	115	1013·8	−0·1	1010·0	74·7	+0·6	78	10	57·9	+2·2	52	15	64·3	67·7	61·0	63·0	16·6	+0·7	17·8	81	−2
Silchar ...	96	1014·0	−0·4	1009·9	79·1	+0·7	87	6	56·8	+2·1	53	30	61·9	71·6	59·7	64·9	16·7	+0·3	18·2	88	+5
Tura ...	1215	974·4	...	971·8	74·9	...	35	6	55·9	...	50	14	62·0	63·7	57·7	59·5	14·1	...	15·7	78	...
West Bengal																					
Dum Dum ...	33	1016·0	...	1012·5	79·2	...	89	24	56·9	...	50	15,16	66·2	71·8	60·7	63·1	15·8	...	16·1	71	...
Calcutta ...	21	1016·6	−0·4	1013·0	80·3	+0·9	87	24,25	57·5	+2·5	50	15,16	66·0	70·5	61·1	63·6	16·0	+1·2	16·8	74	−3
Saugor Island ...	10	1016·3	−0·8	1012·9	76·8	−0·1	82	26	60·7	+1·5	55	16	69·2	70·9	63·8	64·3	17·6	+0·2	17·7	73	−4
Sandheads ...	32	1015·9	−0·4	1013·0	...	...	...	...	...	...	...	...	74·5	74·8	67·0	66·5	19·2	+1·0	18·2	66	+8
Midnapore ...	149	1012·1	−0·4	1008·1	79·4	−0·4	88	23	54·8	−0·7	48	16	65·4	73·7	58·7	63·8	14·1	+1·0	15·7	65	+2
Contai ...	35	1015·2	...	1011·9	79·2	...	87	24	57·6	...	52	15	66·0	71·0	61·0	63·4	16·1	...	16·6	73	...
Burdwan ...	106	1013·5	−0·7	1009·6	80·6	+1·9	89	24	55·8	−0·1	48	15	62·2	72·4	57·3	63·9	13·7	+0·2	16·5	73	+5
Krishnagar ...	48	1015·6	−0·6	1012·0	81·0	+2·3	88	24	53·4	+0·3	45	15,16	62·6	71·4	59·0	64·0	15·6	+1·1	16·9	80	+6
Asansol ...	414	1002·8	−0·4	998·8	80·2	+1·6	88	22,24	53·5	+0·1	47	15	63·0	72·5	56·3	60·6	12·7	−0·3	12·6	64	−3
Berhampore ...	62	1015·4	−0·4	1011·3	80·5	+3·4	88	24	55·1	0	48	14,15,16	62·4	71·9	57·9	64·3	14·3	−0·4	17·2	74	−2
Malda ...	103	1013·7	−0·8	1009·9	77·3	+1·5	82	24	52·4	−0·1	45	16	64·5	69·8	58·6	61·7	14·1	−0·2	15·3	69	−4
Cooch Behar ...	145	1012·6	...	1008·7	76·9	...	81	7,10	54·1	...	50	14,15, 20	63·0	67·3	59·2	62·3	15·3	...	16·9	79	...
Jalpaiguri ...	271	1007·6	−0·7	1003·8	75·6	−1·1	81	3	54·5	+1·3	51	4 days	58·3	70·1	56·4	62·9	14·6	0	16·6	89	+5
Orissa																					
Balasore ...	65	1015·0	−0·6	1011·4	80·6	+0·6	88	24	56·1	+0·4	51	15	65·9	70·9	60·0	64·4	14·9	+0·7	17·7	69	−1
Chandbali ...	20	1016·2	−0·4	1013·3	81·3	+1·0	88	23	57·6	−0·2	53	15,16	66·3 / 67·0	73·1 / 74·4	62·4 / 62·3	67·9 / 66·1	17·4 / 16·7	+1·4 / −0·4	21·2 / 17·9	80 / 73	+5 / 0
Puri ...	20	1016·5	−0·1	1013·3	80·6	+0·1	84	27	62·1	−0·4	59	15	67·9	74·4	62·3	66·1	16·7	−0·4	17·9	73	0
Cuttack ...	87	1013·9	−0·9	1010·3	81·9	+0·7	87	23,25	57·6	−1·1	54	11,16	62·6	75·3	58·7	64·0	15·1	−0·7	15·0	77	+2
Gopalpur ...	56	1015·2	−0·2	1011·9	81·0	+0·6	85	8	58·8	−2·2	55	9	66·7	74·6	61·2	65·6	16·0	−1·2	17·5	72	0
Angul ...	455	1001·7	+0·2	997·9	78·6	−1·4	84	23	53·1	−1·9	50	9 days	61·9	74·9	57·2	62·2	14·1	−0·4	13·7	74	+2
Sambalpur ...	486	1000·0	−0·9	996·6	82·0	+1·8	86	4 days	...	...	...	...	61·2	75·1	56·6	62·7	13·7	−0·5	13·8	74	+1
Jharsuguda ...	726	991·8	...	988·1	...	...	...	...	...	...	...	...	63·0	69·1	56·6	58·7	13·2	...	12·2	65	...
Titilagarh ...	691	993·1	...	989·4	82·2	...	87	23	51·9	...	47	4	62·1	76·1	56·6	62·5	13·2	...	13·3	67	...
Chota Nagpur																					
Purulia ...	835	988·5	...	984·7	79·7	...	87	21,22, 24	54·5	...	48	17	64·1	71·4	55·8	59·6	11·3	...	11·9	57	...
Jamshedpur ...	423	1002·8	−0·2	998·6	80·3	+0·5	88	22	51·5	0	45	15,16	59·4	72·1	54·8	61·4	12·7	−0·2	14·0	73	−2
Chaibasa ...	742	991·4	−0·3	987·5	80·5	+2·3	87	22	51·3	−0·3	45	15	58·9	73·0	54·3	61·1	12·5	−0·8	12·9	73	−3
Ranchi ...	3,150	942·7	+0·3	940·0	76·3	+3·4	86	21	50·5	−0·1	43	3	61·8	67·0	52·4	55·5	9·6	−0·7	10·4	52	−6
Hazaribagh ...	2,006	947·5	−0·5	944·8	73·9	+1·5	85	20	49·1	−0·9	42	3	60·1	64·3	51·6	53·8	9·7	−0·7	9·9	55	−6
Daltonganj ...	725	993·3	−0·6	988·6	77·2	+0·8	87	22	46·7	+0·2	38	15	57·9	69·6	52·9	60·4	11·5	−0·1	14·0	70	−9
Dhanbad ...	839	987·6	...	...	78·4	...	87	21	53·1	...	47	15,16, 17	64·0	...	56·9	...	12·7	...	...	62	...
Bihar																					
Purnea ...	124	1013·4	−0·4	1008·9	77·9	+1·6	84	6	51·0	+1·5	44	14	60·1	65·9	56·2	60·8	13·6	−0·1	16·0	78	−7

Cloud amount (Oktas)		Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from:—																	STATION
										0830 hrs. I. S. T.										1730 hrs. I. S. T.								
Departure from normal	Mean 1730 hrs, I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
0	4·5	6·67	−1·25	2·50	5	7	−0·2	8·8	−0·3	5	16	4	1	2	2	0	0	1	1	18	5	0	1	4	1	1	0	**Bay Islands** Port Blair
+2·3	4·0	0·51	−0·12	0·18	23	2	+0·6	1·0	+0·5	5	5	7	3	1	1	0	2	7	1	0	2	0	2	0	0	1	25	**Assam** Dibrugarh
−1·0	3·2	0·25	−0·33	0·14	18	1	−0·5	1·7	+0·7	2	3	0	2	3	4	1	4	12	11	3	2	1	1	0	0	3	10	Sibsagar
+0·1	2·1	0	−0·25	0	...	0	−0·7	1·0	−0·4	1	6	15	1	1	0	1	2	4	0	2	4	0	0	0	0	1	24	Tezpur
+1·1	2·1	0	−0·16	0	...	0	−0·5	1·5	+0·4	9	7	3	2	3	1	0	2	4	0	4	1	0	2	2	0	0	22	Gauhati
+0·7	0·9	0	−0·07	0	...	0	−0·1	1·2	−2·3	0	6	6	1	1	1	0	0	16	0	1	1	1	0	0	0	0	28	Dhubri
+0·7	1·7	0	−0·42	0	...	0	−0·7	1·0	+0·1	0	1	2	4	3	2	0	1	18	0	1	1	1	0	0	1	0	27	Silchar
...	2·1	0	...	0	...	0	...	3·5	...	0	3	9	5	5	4	0	0	5	1	7	6	9	5	0	0	0	3	Tura
...	1·6	0	...	0	...	0	...	2·5	...	7	2	0	1	1	2	1	8	9	7	1	1	0	3	2	2	10	5	**West Bengal** Dum Dum
+0·7	1·6	0	−0·18	0	...	0	−0·3	1·8	−0·1	5	3	0	0	0	2	1	7	13	1	0	0	0	1	2	0	1	26	Calcutta
−0·3	1·8	0	−0·21	0	...	0	−0·4	6·7	+1·2	14	8	0	0	0	4	0	5	0	12	2	0	0	1	8	2	6	0	Saugor Island
0	2·1	0	−0·15	0	...	0	−0·3	...	...	13	5	0	0	0	2	1	7	3	13	2	0	0	0	1	2	7	7	Sandheads
−0·3	1·9	0	−0·16	0	...	0	−0·3	2·1	+0·7	21	1	0	0	0	2	0	0	7	2	0	0	0	2	1	0	0	26	Midnapore
...	3·1	0	...	0	...	0	...	2·2	...	11	7	0	0	1	6	0	4	2	5	2	0	2	6	4	0	1	11	Contai
−0·7	1·0	0	−0·19	0	...	0	−0·3	2·5	+1·3	6	1	1	0	1	6	7	9	0	6	1	0	1	1	1	6	4	11	Burdwan
+0·2	1·7	0	−0·11	0	...	0	−0·2	1·4	+0·3	9	0	0	0	5	1	13	1	2	0	0	0	0	1	0	0	0	30	Krishnagar
0	1·1	0	−0·18	0	...	0	−0·4	3·6	+0·3	2	0	0	0	0	1	8	18	2	3	1	0	1	0	3	1	12	10	Asansol
+0·4	1·5	0	−0·16	0	...	0	−0·4	0·9	0	4	0	0	1	2	2	6	2	14	0	0	0	0	0	0	0	3	28	Berhampore
+1·1	1·2	0·15	+0·08	0·15	28	1	+0·8	2·8	0	3	4	1	0	3	1	5	11	3	3	3	0	1	1	0	4	14	5	Malda
...	1·6	0	−0·16	0	...	0	−0·3	1·7	...	2	11	8	2	1	1	1	0	5	0	3	0	0	1	1	1	1	24	Cooch Behar
+1·1	1·3	0	−0·17	0	...	0	−0·4	1·8	+1·0	12	3	0	0	0	0	1	0	15	0	1	2	0	0	0	3	0	25	Jalpaiguri
+0·4	2·4	0	−0·16	0	...	0	−0·3	2·5	+0·9	15	3	0	0	2	2	1	7	1	1	0	0	1	1	0	0	0	28	**Orissa** Balasore
~~−0·4~~	~~1·8~~	0	−0·03	0	...	0	−0·1	3·0	−0·3	~~20~~	~~6~~	0	0	0	0	0	~~6~~	0	~~4~~	~~6~~	1	~~7~~	~~5~~	~~9~~	0	~~0~~	0	Chandbali
−0·4	1·8	0	−0·24	0	...	0	−0·4	6·4	+0·6	20	6	0	0	0	0	0	5	0	4	5	1	7	5	9	0	0	0	Puri
−0·4	1·4	0	−0·23	0	...	0	−0·4	1·7	+0·8	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	31	Cuttack
−0·1	1·0	0	−0·53	0	...	0	−0·7	5·7	−0·4	25	0	0	0	0	0	0	6	0	5	3	8	7	6	0	0	0	2	Gopalpur
−0·3	1·3	0	−0·14	0	...	0	−0·4	3·5	+0·5	1	0	0	0	0	1	9	14	6	10	8	2	2	2	0	0	5	2	Angul
+0·1	1·5	0	−0·17	0	...	0	−0·3	1·7	−0·2	3	12	5	0	1	0	0	1	9	4	1	1	3	7	1	1	1	12	Sambalpur
...	2·0	0	...	0	...	0	...	...	...	14	4	0	0	0	0	0	3	10	1	0	0	1	0	0	0	1	28	Jharsuguda
...	1·7	0	...	0	...	0	...	1·0	...	1	0	1	4	5	2	1	0	17	0	1	2	1	0	0	0	0	27	Titilagarh
...	1·6	0	...	0	...	0	...	2·1	...	4	1	0	0	3	2	11	9	1	3	3	0	0	1	1	3	5	15	**Chota Nagpur** Purulia
0	1·5	0	−0·23	0	...	0	−0·4	2·0	+0·5	0	1	1	1	0	1	13	9	5	1	0	5	2	0	0	1	1	21	Jamshedpur
+0·2	2·3	0	−0·18	0	...	0	−0·4	1·0	−0·1	0	1	0	2	0	11	0	0	17	0	0	0	0	0	1	0	0	30	Chaibasa
−0·5	0·6	0·13	−0·14	0·13	28	1	+0·4	2·3	−0·6	4	1	0	0	0	2	1	3	20	3	1	0	1	0	1	1	3	21	Ranchi
+0·7	2·0	0·26	−0·01	0·26	28	1	+0·5	4·5	0	1	2	0	0	2	4	0	14	8	7	2	0	0	0	0	0	20	2	Hazaribagh
−1·1	2·5	0·47	+0·22	0·43	28	1	+0·5	1·0	−0·5	1	1	5	0	0	0	1	0	23	0	1	2	0	0	0	7	4	17	Daltonganj
...	...	0·31	...	0·31	28	1	...	3·0	...	2	3	0	1	0	8	3	4	10	...	...	...	...	...	...	...	...	...	Dhanbad
+1·2	0·8	0	−0·12	0	...	0	−0·3	1·8	+0·7	4	4	2	2	0	10	7	0	2	1	0	0	0	0	0	5	0	25	**Bihar** Purnea

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0800 HRS. G. M. T.)

STATION	Height of bar, cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Bihar (Contd.)																					
Darbhanga ...	161	1012·4	−0·1	1008·2	77·7	+1·3	82	4,5	51·6	−0·2	45	16,17	58·2	68·2	55·4	61·7	13·5	−0·8	15·8	83	0
Motihari ...	218	1009·9	−0·5	1006·2	74·6	−0·6	79	4	49·0	+0·9	42	14,15	60·9	65·6	57·0	60·2	14·6	+1·1	15·8	78	−2
Patna ...	173	1011·4	−0·8	1007·9	76·3	+1·7	82	21	53·2	+0·9	46	16,17	61·3	69·9	54·6	59·3	11·7	−1·1	12·6	63	−7
Dehri ...	352	1005·1	...	1001·7	77·2	...	86	21,22	52·4	...	46	16	60·4	70·1	54·4	58·5	11·8	...	11·7	65	...
Gaya ...	365	1004·6	−0·3	1001·0	77·3	+2·7	86	22	50·2	+1·6	44	15,16	60·2	69·5	53·0	56·8	10·7	−0·3	10·3	59	−8
Dumka ...	489	999·9	−0·8	996·5	80·6	+4·2	88	24	...	...	...	...	65·5	72·1	56·2	59·9	11·1	−1·7	12·4	52	−14
Sabour ...	122	1013·0	−0·6	1009·3	76·4	+0·7	82	20	48·4	+0·5	40	15,16	59·8	67·2	55·6	60·5	13·4	−0·1	15·2	75	−7
U. P., East																					
Gonda ...	360	1004·7	...	1002·0	74·8	−1·0	81	22	47·3	−0·4	40	14,16	54·4	66·0	51·1	60·2	10·9	−1·1	15·0	78	−4
Gorakhpur ...	254	1008·3	−0·6	1005·5	75·0	+0·5	80	6,21,22	51·5	+1·7	44	16	58·0	68·3	53·0	60·1	11·5	−1·1	14·1	70	−8
Azamgarh ...	255	1007·8	...	1002·0	75·2	...	84	22	48·6	...	41	16,17	54·8	68·2	52·0	61·1	11·9	...	15·2	81	...
Banaras ...	250	1008·9	−0·5	1005·5	75·5	+0·3	85	22	49·7	+1·5	43	16	58·1	70·4	52·5	59·2	11·0	−1·0	12·1	66	−10
Allahabad (Bamrauli) ...	322	1006·1	−0·9	1003·4	75·6	−0·1	84	20	49·6	+2·5	43	17,23	57·1	68·3	52·8	59·2	11·5	+0·5	13·0	73	−4
Fatehpur ...	375	1004·7	...	1001·6	73·9	−2·0	85	21	47·9	+0·4	41	2,15,16	55·7	68·0	50·7	58·0	10·5	−1·0	12·1	68	−1
Banda ..	398	1003·7	...	1001·1	76·2	...	86	21	48·0	...	42	16,29	55·6	70·3	49·7	58·6	9·6	...	11·6	63	...
Kanpur ...	414	1003·2	−0·3	1000·5	74·2	+0·2	83	21	47·4	+0·9	40	16	54·8	67·3	49·5	57·3	9·6	−1 2	11·4	65	−12
Lucknow ...	371	1004·5	−0·4	1001·8	75·8	−0·1	82	21	48·0	+0·7	41	17	53·5	67·1	49·7	58·2	10·1	−0·9	12·4	71	−6
Bahraich ...	407	1003·6	+0·5	1000·6	74·8	−0·2	82	22	47·3	−0·9	40	14,16	57·2	64·9	53·0	58·0	11·9	+0·3	13·3	72	−8
U. P., West																					
Jhansi ...	823	988·8	−0·7	985·8	73·1	−4·9	84	19	46·3	−2·0	38	29	55·3	70·0	48·5	56·3	8·3	−1·8	9·5	58	−2
Agra ...	553	998·7	0	995·8	72·7	−2·7	80	4days	42·3	−4·0	36	28,29	48·9	69·2	44·3	55·7	8·0	−0·8	9·0	67	+5
Mainpuri ...	516	999·8	+0·1	997·1	74·1	−1·3	81	12,21	44·3	−3·0	39	29	51·5	67·3	47·5	58·5	9·2	−0·6	12·4	73	+2
Aligarh ...	615	996·4	..	993·6	72·4	−1·6	80	12	42·5	−4·6	39	5 days	48·8	65·4	43·7	53·6	7·6	−1·6	8·4	62	0
Bareilly ...	568	997·1	−0·6	994·2	73·6	+0·5	80	21	46·8	+0·2	40	16	52·8	66·3	48·1	55·8	9·6	−1·2	10·3	69	−12
Meerut ...	728	991·6	−0·5	...	71·6	−1·3	77	21	42·4	−2·2	36	30	49·2	...	44·3	...	7·6	−1·3	...	65	−10
Roorkee ...	899	985·5	−0·5	983·0	70·6	−0·6	77	21	42·5	−0·9	36	14,16	48·4	64·0	45·3	54·0	8·8	−0·8	9·8	77	−5
Dehra Dun ...	2,239	939·1	−0·4	937·7	68·8	−0·3	76	17	43·2	−1·9	38	14	49·2	60·2	45·4	53·4	8·6	−0·1	10·9	74	−1
Punjab (I)																					
New Delhi ...	710	993·1	+0·4	990·2	71·7	−2·0	78	11	41·7	−3·3	37	4 days	46·9	63·8	40·9	52·1	6·1	−2·3	8·3	55	−9
Hissar ...	725	992·8	+0·4	990·5	72·8	−1·4	82	11	36·5	−6·7	31	27,29, 31	41·4	66·8	37·2	52·7	5·7	−2·5	7·5	64	−5
Karnal ...	818	988·2	...	986·3	70·9	...	76	21	41·6	...	38	24,29, 31	45·3	63·7	41·5	52·3	7·0	...	8·3	67	...
Ambala ...	892	984·9	−1·2	983·2	73·1	+0·8	79	4	41·8	−2·0	37	24	45·8	65·6	42·0	52·4	7·3	−1·6	7·9	69	−5
Patiala ...	822	988·3	...	986·3	71·7	...	77	10	40·8	...	35	18	45·9	62·0	40·8	50·9	6·5	...	7·9	64	...
Ludhiana ...	810	989·0	−0·2	986·9	70·9	+0·1	76	5 days	37·8	−6·4	32	25	41·5	62·2	38·4	51·3	6·4	−2·3	7·9	73	−2
Ferozepore ..	657	995·5	...	993·1	69·4 (a)	...	74	2,9	35·5 (a)	...	29	22	40·5	61·5	38·3	50·6	7·2	...	7·4	79	...
Amritsar ...	769	990·9	...	989·1	67·8	...	73	10,11	33·5	...	27	24,25	39·1	59·3	37·3	50·4	6·6	...	8·3	84	...
Jammu & Kashmir																					
Srinagar ...	5,205	846·1	−0·7	843·5	47·1	−1 1	55	1	26·5	−1·1	22	14,15	29·9	43·2	28·7	37·9	5·1	−0·4	6·0	88	−2
Gulmarg ...	8,709	Closed during winter months.																			
Dras (R) ...	10,059																				
Leh ...	11,529	665·2	−1·6	663·5	34·1	−1·2	41	3	11·1	−1·6	7	23,26	15·4	26·1	11·5	20·1	1·2	−0·5	1·9	37	−21
Skardu (R) ..	7,505																				
Gilgit (R) ..	4,890																				
Misgar (R) ...	10,190																				

(a) Mean of 30 days.

(R) Register not received.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity miles per hour		Wind direction—Number of winds from:—																	STATION
											0830 hrs. I. S. T.										1730 hrs. I. S. T.								
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
1	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
8	+0·9	1·4	0	−0·12	0	...	0	−0·3	0·3	−0·8	0	3	4	0	0	2	12	2	8	0	0	0	0	0	3	0	0	28	**Bihar** *(Contd.)* Darbhanga
3	+0·1	1·6	0·10	−0·05	0·10	25	1	+0·6	1·4	+0·1	2	0	9	0	0	0	4	3	13	0	0	3	0	0	0	1	0	27	Motihari
6	+0·6	1·5	0·05	−0·17	00·5	28	0	−0·5	3·3	+1·6	0	4	1	0	0	14	7	3	2	0	4	0	0	1	1	16	3	6	Patna
3	...	2·7	00·6	−0·12	0·06	28	0	−0·5	2·5	...	0	0	0	1	5	16	3	4	2	3	1	0	0	0	0	0	20	7	Dehri
7	+0·7	1·8	0·34	+0·16	0·22	28	2	+1·6	3·3	+0·2	0	0	0	2	18	3	2	0	6	3	0	0	0	0	0	12	7	9	Gaya
7	−0·2	0·9	0·59	+0·46	0·35	28	2	+1·7	...	...	4	0	3	0	0	1	14	9	0	6	2	2	0	0	0	11	8	2	Dumka
0	+0·7	1·7	0·06	−0·06	00·3	27,28	0	−0·1	2·7	0	1	2	1	0	1	12	9	0	5	7	1	1	0	0	0	5	7	10	Sabour
8	+0·3	1·9	1·46	+1·14	1·16	25	2	+0·9	2·2	+0·1	1	0	2	0	0	0	9	10	9	0	0	1	0	0	0	2	1	27	**U. P., East** Gonda
3	+0·4	1·2	0·37	+0·18	0·37	25	1	+0·6	1·9	+1·1	0	1	3	0	1	1	17	2	6	0	0	0	0	0	1	10	1	19	Gorakhpur
0	...	1·8	0·74	...	0·49	25	2	...	...	...	0	1	0	0	0	4	1	1	24	1	0	0	0	0	1	0	0	29	Azamgarh
3	+1·2	1·8	0·22	−0·05	0·12	26	2	+1·5	4·9	+3·1	1	0	3	1	4	14	6	2	0	5	4	0	0	0	2	15	4	1	Banaras
3	+0·8	2·7	0·75	+0·41	0·52	25	2	+1·3	2·5	+0·4	1	2	3	0	1	8	7	3	6	1	5	0	0	0	1	10	5	9	Allahabad (Bamrauli)
0	+1·6	3·1	2·60	+2·26	1·55	25	3	+1·9	2·5	+0·9	0	2	4	0	1	1	10	4	9	0	1	2	0	0	0	2	1	25	Fatehpur
2	...	3·1	1·52	...	1·37	25	2	...	1·7	...	1	3	2	0	0	1	13	1	10	1	1	2	0	0	0	10	4	13	Banda
3	+1·6	2·5	3·13	+2·85	1·60	25	2	+1·2	4·6	+2·5	2	4	3	1	0	4	8	4	5	3	2	2	0	0	0	11	5	8	Kanpur
9	+0·9	2·8	1·87	+1·55	0·97	24	2	+1·3	1·5	+0·5	1	2	3	1	0	4	10	4	6	0	0	3	0	0	1	3	1	33	Lucknow
6	+0·6	2·1	0·99	+0·65	0·64	25	2	+1·1	2·3	+1·1	1	0	2	2	0	2	5	4	15	0	0	2	2	0	2	7	2	16	Bahraich
9	+0·8	2·7	1·18	+0·89	0·55	24	3	+2·2	1·9	+0·2	0	1	2	0	0	1	6	4	17	1	0	0	0	0	0	1	2	27	**U. P., West** Jhansi
1	−0·3	1·2	0·05	−0·25	0·05	25	0	−0·8	1·5	−0·8	0	0	0	0	0	0	5	4	22	0	0	0	0	0	0	0	6	25	Agra
4	+1·0	1·9	0·31	−0·06	0·31	25	1	+0·2	...	...	0	0	1	1	0	4	7	3	15	0	1	1	0	0	0	5	13	11	Mainpuri
7	+0·3	2·1	0·10	−0·33	0·10	25	1	−0·2	3·5	+0·5	0	0	0	0	0	0	4	7	20	0	0	0	0	0	0	3	4	24	Aligarh
6	+0·2	2·5	0·33	−0·08	0·33	25	1	0	1·7	+0·5	2	0	4	1	0	1	7	4	12	0	0	2	0	0	0	9	0	20	Bareilly
6	−0·8	...	0·13	−0·35	0·13	25	1	−0·2	4·1	...	1	2	3	0	0	0	5	10	10	...	...	...	...	...	...	...	...	...	Meerut
7	−0·1	2·3	1·06	+0·38	0·76	26	2	+0·7	2·2	+0·9	1	0	1	4	0	2	2	5	16	0	1	0	1	1	2	3	6	17	Roorkee
4	−0·1	2·7	1·34	+0·32	0·99	26	2	+0·3	1·6	+0·1	6	7	0	0	0	1	0	1	16	0	0	0	2	0	1	4	0	24	Dehra Dun
9	+0·1	2·3	0	−0·43	0	...	0	−0·9	6·0	...	0	0	0	0	0	4	16	6	0	5	2	1	1	0	1	2	18	1	**Punjab (I)** New Delhi
2	−0·5	1·7	0	−0·39	0	...	0	−1·0	3·6	+0·6	1	1	3	1	3	6	5	3	8	4	0	0	0	0	0	4	13	10	Hissar
3	...	2·8	00·7	...	0·07	25	0	...	3·4	...	0	0	1	1	0	0	12	10	7	1	1	0	0	1	0	14	6	6	Karnal
6	−0·6	2·0	0	−0·76	0	...	0	−1·5	4·1	+2·0	2	0	0	3	0	0	3	16	7	1	0	0	0	0	0	6	6	18	Ambala
3	...	2·4	0	...	0	...	0	...	4·8	...	10	1	1	2	0	0	1	11	5	10	0	0	1	0	0	3	15	2	Patiala
8	−0·3	1·4	0	−0·72	0	...	0	−1·4	1·0	−0·1	0	1	0	1	0	0	5	3	21	0	0	0	0	0	0	6	5	20	Ludhiana
8	...	1·6	0	...	0	...	0	...	...	...	1	1	0	0	0	0	1	1	27	0	1	0	0	0	0	0	0	30	Ferozepore
0	...	1·4	0	...	0	...	0	...	4·3	...	4	5	1	2	1	2	6	4	6	3	0	0	1	0	2	11	11	3	Amritsar
4	−0·5	3·4	0·15	−1·17	0·14	20	1	−2·4	1·7	−0·3	0	0	5	10	2	1	0	2	11	2	2	1	2	0	1	1	11	11	**Jammu & Kashmir** Srinagar
																													Gulmarg
																													Dras (R)
2	−1·4	4·4	0·07	−0·12	0·04	18	0	−0·6	3·4	+2·0	0	3	1	1	0	2	0	0	24	0	2	0	2	1	7	0	0	19	Leh
																													Skardu (R)
																													Gilgit (R)
																													Mirgar (R)

(R) Register not received.

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Rajasthan, West																						
Sri Ganganagar ...	580	998·1	...	995·8	71·1	−2·5	78	11	34·6	−5·4	29	22,28	42·3	64·8	38·9	53·5	6·4	−1·1	8·9	72	+7	43
Bikaner ...	734	992·3	+0·3	989·7	71·8	−4·7	80	10,11	33·6	−8·4	27	4 days	39·9	68·4	34·5	52·7	4·3	−2·0	6·6	53	−3	27
Jaisalmer ...	793	990·1	...	987·8	74·7	...	80	4 days	40·8	...	31	22,27	47·8	70·5	39·7	53·0	4·9	...	6·2	39	...	33
Jodhpur ...	736	992·3	+2·0	989·7	75·6	−3·4	82	4	47·3	−3·2	39	19,27,28	51·9	72·5	40·5	51·7	3·5	−3·9	3·9	27	−23	14
Phalodi ...	783	989·8	...	988·2	72·6	...	80	10,11	41·4	...	34	22,25	45·7	70·5	38·5	55·4	5·0	...	8·6	45	...	34
Barmer ...	638	995·7	+1·3	992·9	76·0	−4·1	83	11	51·2	−2·3	45	26	54·1	72·8	45·7	58·2	6·6	−1·8	10·3	48	−5	37
Rajasthan, East																						
Sikar ...	1419	966·8	...	966·1	72·3	...	79	11	34·2	...	25	27,28	41·1	64·7	39·2	58·7	7·2	...	14·4	78	...	63
Jaipur ...	1431	967·8	−0·5	965·5	74·2	−2·2	79	4 days.	42·4	−5·2	35	28,29	54·1	67·3	43·6	51·6	5·0	−3·3	6·1	35	−20	26
Ajmer ...	1593	962·6	0	959·9	72·5	−2·9	78	10,11	40·4	−6·2	34	29,30	46·3	66·9	39·8	49·5	5·7	−2·8	5·1	54	−3	22
Kotah ...	843	988·4	0	985·2	76·2	−3·9	82	1	49·0	−3·1	41	28,29	52·6	71·9	45·7	55·9	7·5	−1·9	8·2	55	−2	31
Jhalawar ...	1053	980·1	−0·6	977·7	75·6	−2·6	84	18	45·9	−2·8	37	29	50·1	72·5	45·4	55·6	8·4	−1·3	7·7	66	+3	29
Udaipur ...	1910	951·3	−0·1	948·6	75·0	−3·2	85	18	41·6	−7·0	33	29	51·5	69·9	44·0	55·1	6·6	−2·0	8·7	53	−5	36
Madhya Bharat																						
Gwalior ...	681	994·2	...	990·9	73·2	...	83	12,19	41·5	...	35	29	60·0	68·2	49·8	54·4	7·8	...	8·0	46	...	35
Guna ...	1571	962·4	−0·5	959·9	76·8	−1·1	84	18,19,21	42·5	−3·0	31	31	51·0	71·6	45·1	54·2	7·8	−1·4	7·4	63	−3	35
Neemuch ...	1626	961·2	0	958·6	76·2	−2·2	83	18	46·2	−3·2	38	29	52·7	72·5	43·7	53·8	6·1	−2·6	6·6	45	−8	24
Ratlam ...	1596	961·1	...	958·6	78·9	...	86	1	50·6	...	43	19	55·7	75·7	50·1	63·6	10·1	...	15·2	67	...	53
Indore ...	1839	952·7	−0·8	950·1	78·8	−0·9	85	18	47·3	−2·3	38	29	56·7	73·6	49·7	58·6	9·3	−1·6	10·8	60	+8	39
Bhopal (Bairagarh)	1714	957·3	−0·7	954·6	78·0	−0·2	85	19,22	49·7	+0·1	42	28	57·3	71·3	49·0	57·2	8·5	−1·8	10·3	55	−5	42
Madhosagar ...	757	991·1	...	988·3	73·8	...	85	19	47·3	...	41	28	53·8	68·7	46·2	53·5	7·9	...	7·4	57	...	31
Vindhya Pradesh																						
Nowgong ...	750	991·5	−0·3	988·6	75·2	+0·7	87	19	44·7	−1·7	36	3	51·9	71·1	47·7	56·7	9·4	−1·0	9·5	71	−5	41
Sutna ...	1041	980·9	−0·5	977·7	76·5	+0·8	87	21	47·6	+0·1	39	14,15	57·9	69·9	53·7	60·7	11·4	+1·3	14·5	67	+3	56
Umaria ...	1506	964·6	...	961·7	77·2	+0·3	87	19,20,21	46·2	+0·4	37	4	57·1	69·2	51·2	58·7	10·3	0	12·5	65	−2	52
Madhya Pradesh East																						
Gondia ...	1026	981·4	...	978·4	80·8	...	85	22,24	53·2	...	48	4 days	61·6	75·5	55·9	62·1	12·7	...	13·0	68	...	43
Pendra ...	2040	946·5	−0·5	943·7	75·5	+1·8	81	21	50·5	+0·9	44	14	61·6	67·6	52·2	55·2	9·6	−1·3	9·9	52	−12	43
Champa ...	805	989·2	...	985·3	81·8	...	88	24	53·9	...	50	16,17	61·4	77·6	54·6	60·6	11·5	...	10·5	62	...	32
Raipur ...	979	982·6	−0·6	979·4	80·7	+0·7	85	20,23,24	54·7	+0·2	50	4	62·1	77·1	55·1	62·2	11·6	−0·7	12·1	62	−2	39
Kanker ...	1318	971·0	−0·3	967·5	81·2	+1·1	86	20,24	50·1	−0·6	45	6 days	59·6	77·3	54·2	61·6	11·8	−1·4	11·7	69	−6	36
Chanda ...	634	994·4	−0·6	990·3	84·6	+2·1	87	5 days	52·6	−0·2	44	4	61·6	80·5	56·0	62·9	12·8	−1·3	11·6	68	−4	33
Jagdalpur ...	1815	951·7	−0·1	950·6	80·0	+1·2	85	23	47·3	−2·4	43	5 days	56·1	75·0	53·0	60·3	12·5	−1·8	12·1	82	−4	40
Madhya Pradesh West																						
Buldhana ...	2133	942·1	...	939·4	81·4	...	87	18	59·2	...	55	10	64·3	78·9	55·4	63·2	11·1	...	13·7	57	...	41
Akola ...	935	984·0	−0·7	980·0	86·3	+1·6	90	1	53·7 (b)	+0·4 (b)	47	4	61·2	82·2	53·3	63·1	10·2	−0·7	11·1	58	+1	33
Amravati ...	1213	974·0	−0·7	970·5	84·0	+0·8	88	1,19	58·9	+0·5	55	6,10	64·0	81·4	56·9	64·9	12·7	+1·7	13·3	63	+12	38
Yeotmal ...	1481	964·8	...	962·1	83·2	...	87	16,17	59·0	...	50	5	66·7	78·4	57·0	61·0	11·3	...	10·4	52	...	33
Khandwa ...	1044	979·7	−0·8	976·1	84·3	+0·2	90	18	51·8	+0·3	45	3,4	61·6	79·1	54·1	62·7	11·5	+0·9	12·1	59	−1	37
Hoshangabad ...	992	981·8	−1·4	978·8	80·0	0	89	23	52·4	−1·1	46	1	57·4	75·2	52·8	60·5	11·6	+0·8	11·6	70	+10	41
Sagar ...	1808	954·0	−0·8	951·1	75·2	−1·7	84	19,22	52·3	−0·7	46	28	58·4	69·2	49·8	55·4	8·3	−0·5	9·4	54	+3	29
Jabalpur ...	1289	972·4	−0·1	969·0	79·5	+0·4	87	21,22	48·3	+1·8	39	3,4	56·2	72·9	51·6	61·3	11·0	0	13·3	71	−2	49
Seoni ...	2027	946·7	−0·5	944·1	78·8	+1·1	85	18	50·7	+0·1	44	4,20	60·7	71·5	56·9	60·1	14·3	+3·6	1·3i	81	+21	51

(b) Mean of 29 days.

ud amount Oktas)		Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																					STATION
										0830 hrs. I.S T.											1730 hrs. I.S.T.											
Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53			
																															Rajasthan, West
−1·4	0·9	0	−0·12	0	...	0	−1·0	1·2	−2·4	0	1	3	1	1	1	1	1	22	1	1	0	0	0	0	1	9	19		Sri Ganganagar
−0·8	1·0	0	−0·20	0	...	0	−0·5	1·2	−1·3	0	1	0	4	1	0	0	0	25	2	19	0	3	0	0	0	1	6		Bikaner
...	1·8	0	...	0	...	0	...	3·5	...	0	12	0	0	0	4	0	0	15	1	23	0	0	0	0	0	7	0		Jaisalmer
−0·3	1·9	0	−0·11	0	...	0	−0·3	4·0	−2·1	3	23	3	0	0	0	0	0	2	5	12	6	0	0	0	3	2	3		Jodhpur
...	1·8	0	−0·10	0	...	0	−0·2	4·0	...	0	4	9	10	4	1	2	1	0	17	6	1	0	0	0	2	5	0		Phalodi
+0·5	2·2	0	−0·10	0	...	0	−0·3	5·0	+0·9	2	1	0	0	0	0	0	26	2	9	12	0	0	0	0	0	4	6		Barmer
																															Rajasthan, East
...	2·2	0	...	0	...	0	...	2·2	...	0	1	6	5	1	0	0	0	18	4	4	0	1	0	1	5	9	7		Sikar
−0·5	2·3	0	−0·30	0	...	0	−0·7	2·9	−0·2	3	6	7	2	0	0	0	0	13	9	3	1	2	1	2	1	8	4		Jaipur
−0·2	1·9	0	−0·26	0	...	0	−0·4	2·0	+0·8	2	1	0	0	0	0	6	4	18	8	9	1	0	2	0	1	1	9		Ajmer
+0·1	1·5	0	−0·21	0	...	0	−0·5	1·3	+0·3	1	1	0	0	0	0	6	2	21	1	3	1	0	0	0	0	2	24		Kotah
+0·6	1·7	0·25	+0·06	0·35	24	1	+0·7	2·2	+0·7	7	4	0	0	0	0	0	1	19	11	10	1	0	1	0	3	3	3		Jhalawar
+0·8	1·7	0	−0·11	0	...	0	−0·3	1·3	...	2	2	0	0	1	1	1	5	19	2	10	9	1	0	3	1	0	5		Udaipur
																															Madhya Bharat
...	2·8	0·99	...	0·55	24	2	...	1·2	...	4	0	0	0	1	2	1	13	10	7	1	1	0	0	1	2	12	7		Gwalior
+1·0	2·8	0·47	+0·05	0·26	25	2	+0·8	2·5	+0·9	3	3	10	1	1	0	0	0	13	5	8	4	0	0	1	4	7	2		Guna
+1·2	1·9	0	−0·18	0	...	0	−0·5	3·2	−0·3	2	19	1	2	0	0	0	1	6	1	18	0	0	0	1	1	3	7		Neemuch
...	4·0	0·17	...	0·17	24	1	...	6·0	...	6	17	5	0	0	0	2	0	1	3	14	5	0	0	2	5	2	0		Ratlam
+1·1	2·6	0·06	−0·21	0·06	24	0	−0·6	3·6	+2·2	3	6	3	4	1	0	0	1	13	10	10	3	0	1	3	2	2	0		Indore
+0·6	3·0	2·25	+2·05	1·40	31	2	+1·5	5·0	+1·4	3	8	7	0	0	0	0	0	13	7	6	3	1	0	1	2	1	10		Bhopal (Bairagarh)
...	2·6	0·93	...	0·51	25	2	...	3·1	...	1	1	0	0	7	8	0	0	14	11	6	3	0	0	0	1	8	2		Madhosagar
																															Vindhya Pradesh
+1·4	2·9	1·27	+0·87	1·11	25	1	+0·3	1·4	−0·1	1	1	2	0	3	5	2	2	15	6	5	0	0	0	0	0	3	17		Nowgong
+0·8	2·6	0·51	+0·08	0·33	25	1	+0·1	2·1	+0·4	2	2	0	0	0	1	1	2	23	7	1	2	0	0	0	0	1	20		Sutna
+0·8	2·8	1·79	+1·44	0·80	26	2	+1·1	1·1	−0·7	1	2	0	9	1	1	1	1	15	3	3	0	1	1	0	1	2	20		Umaria
																															Madhya Pradesh East
...	1·8	0	...	0	...	0	...	1·2	...	6	4	3	2	2	2	0	3	9	7	2	0	1	0	1	1	2	17		Gondia
+0·3	2·8	0·01	−0·28	0·01	28	0	−0·5	2·7	+0·4	9	2	1	2	5	0	1	5	6	12	1	0	1	8	0	0	6	3		Pendra
...	2·4	0	...	0	...	0	...	3·1	...	12	4	3	1	0	0	0	6	5	12	2	1	1	1	0	2	7	5		Champa
+0·4	2·5	0	−0·20	0	...	0	−0·3	1·7	−1·0	2	4	2	2	4	0	0	0	17	3	4	0	0	0	0	1	1	22		Raipur
−0·1	2·6	0	−0·14	0	...	0	−0·4	1·4	−0·3	0	0	0	0	0	0	0	0	31	5	8	1	1	0	0	0	3	13		Kanker
+0·3	2·3	0	−0·27	0	...	0	−0·7	1·8	+0·5	0	0	0	0	0	0	0	0	31	0	1	0	5	0	0	0	4	21		Chanda
−0·8	2·3	0	−0·16	0	...	0	−0·4	1·3	+0·1	0	5	1	1	0	0	0	2	22	4	4	0	1	4	4	1	2	11		Jagdalpur
																															Madhya Pradesh West
...	2·3	2·31	...	0·77	30	4	...	...	...	2	0	5	4	16	2	0	2	0	1	2	0	2	4	3	0	19	0		Buldhana
+0·8	2·0	1·02	+0·48	0·59	30	3	+2·1	2·9	+0·5	0	2	9	8	2	0	1	0	9	3	9	5	3	0	1	2	4	4		Akola
+0·5	2·3	0·95	+0·51	0·38	30	3	+2·2	5·3	+2·0	0	30	0	0	0	1	0	0	0	0	17	0	10	0	0	0	4	0		Amravati
...	3·0	0·61	...	0·54	30	1	...	5·1	...	1	11	1	14	0	3	0	1	0	2	17	0	9	0	1	0	2	0		Yeotmal
+1·5	2·2	0·43	+0·11	0·20	25	2	+1·5	2·7	+0·5	3	10	5	2	0	0	0	0	11	8	12	0	4	4	0	0	0	3		Khandwa
+2·2	3·3	2·70	+2·33	1·41	27	5	+4·3	1·3	−0·6	0	1	6	6	1	0	0	0	17	1	1	0	1	1	0	0	1	26		Hoshangabad
+1·5	2·5	1·17	+0·66	0·61	27	3	+2·2	7·9	+0·6	3	10	8	5	2	1	0	1	1	0	17	0	0	2	4	0	6	1		Sagar
+0·4	1·7	1·45	+0·78	0·86	27	4	+3·3	2·1	+1·0	0	2	0	21	0	0	0	0	8	3	12	1	3	1	2	0	2	7		Jabalpur
+0·6	1·5	0·35	−0·17	0·13	31	3	+2·1	2·6	+0·6	2	1	0	1	0	1	0	0	26	6	3	3	4	3	0	0	0	12		Seoni

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Madhya Pradesh West (*Contd.*)																						
Chhindwara ...	2,248	939·3	...	936·4	79·1	...	84	1	50·0	...	42	4	51·2	74·3	51·5	58·6	10·6	...	10·5	65	...	37
Betul ...	2,144	942·9	...	940·0	79·8	...	85	17,18	50·4	...	41	8,9	59·3	71·4	52·9	58·0	10·9	...	10·7	65	...	45
Nagpur ...	1,010	981·6	−0·5	977·9	83·2	+1·5	87	18,23	52·5	−1·3	46	3,4	62·7	78·1	55·3	62·0	11·6	+0·6	11·8	60	+4	36
Gujarat																						
Deesa * ...	466																					
Surat ...	39	1014·0	−0·3	1010·8	90·1	+2·2	98	2	56·8	−2·6	49	25	60·2	82·9	54·1	67·7	11·6	−1·6	16·3	65	+7	43
Ahmedabad ...	181	1010·2	−0·2	1006·7	82·7	−2·0	89	17	49·9	−3·9	43	20	58·5	78·3	48·2	58·0	6·9	−3·5	7·4	41	−19	22
Dohad ...	1,093	978·3	...	974·9	81·9	−2·4	87	4 days	52·2	−0·9	45	20	57·6	77·5	50·3	62·5	9·2	−1·5	12·5	57	−8	41
Baroda ...	115	1011·8	...	1008·8	85·2	−2·0	94	2	50·2	−1·1	40	20	54·1	79·0	49·3	62·9	9·8	−1·8	12·4	70	+6	37
Saurashtra & Kutch																						
Bhuj ...	343	1005·6	+0·7	1003·2	78·2	−3·6	84	4	47·0	−7·4	40	29	53·1	75·7	44·2	54·1	5·9	−4·9	4·6	42	−7	15
Dwarka ...	37	1015·9	+0·5	1013·3	78·6	−2·6	85	1,3	60·0	−1·9	55	27	62·0	74·8	54·1	58·7	10·8	−4·3	9·7	56	−8	34
Jamnagar ...	61	1014·8	+0·2	1012·1	78·5	−4·0	85	4	47·5	−3·9	39	30	54·6	75·6	48·2	61·5	8·6	−1·2	12·3	60	−1	40
Rajkot ...	432	1001·1	+0·1	998·2	82·0	−3·1	91	4	49·1	−4·4	41	4 days	54·6	79·3	45·0	57·0	5·9	−3·1	5·9	41	−8	17
Veraval ...	26	1014·9	+0·1	1011·9	85·8	...	93	17	55·2	...	45	25	62·5	79·2	49·7	63·7	6·5	...	13·1	34	−15	41
Bhavnagar ...	55	1014·4	0	1011·1	83·5	−1·6	88	5 days	50·5	−5·2	43	25,29	54·1	80·2	45·0	59·9	6·1	−3·6	8·5	43	−5	25
Konkan																						
Dahanu ...	15	1013·7	...	1011·4	...	...	...	...	60·8	...	56	28	66·1	76·3	61·3	72·4	16·4	...	25·4	75	....	82
Bombay ...	35	1013·2	−0·4	1010·4	85·4	−1·2	92	9	66·5	−2·3	62	28	72·1	77·3	65·8	70·4	18·8	−0·8	22·2	70	0	70
Alibag ...	23	1013·9	0	. .	82·3	−2·9	89	9	63·3	−1·9	60	28	63·1	...	63·2	...	17·6	+0·6	...	75	+11	...
Harnai ...	66	1011·9	...	1009·2	82·3	...	87	3,17	71·8	...	69	6,27	75·7	78·9	65·8	72·1	17·2	...	23·8	58	...	71
Devgad ...	117	1009·7	...	1006·5	86·0	...	90	10,15	68·5	...	65	11,13	72·2	83·0	65·7	73·4	18·7	...	22·4	70	...	58
Vengurla ...	29	1013·0	...	1009·4	88·4	...	93	15	63·8	...	58	13	71·4	82·5	65·3	72·7	18·6	...	23·1	71	...	61
Marmagao ...	202	1006·9	+0·1	1003·5	85·0	−1·7	90	16	69·9	−0·9	67	3,10,11	74·2	81·3	66·5	71·6	18·8	0	22·1	66	−3	60
Honavar ...	85	1011·4	...	1007·5	89·6	...	95	2	67·5	...	62	5	74·8	83·5	66·0	73·3	17·8	...	23·3	62	...	60
Deccan (Desh)																						
Jalgaon ...	660	992·1	...	989·3	87·0	...	91	18,21,22	52·5	...	45	4 days	58·8	83·7	52·9	65·9	11·0	...	13·7	65	...	36
Malegaon ...	1,432	966·4	−0·5	962·7	86·9	+1·9	92	16	53·1	+0·8	48	2,3,10	62·7	81·6	53·3	61·9	9·7	−0·8	10·1	48	−9	28
Deolali ...	1,874	950·7	...	...	85·6	...	91	17	50·5	...	44	10,14	62·4	...	53·1	...	10·1	...	...	52	...	...
Ahmednagar ...	2,154	941·9	−0·5	938·3	85·6	+2·5	90	17	53·5	+0·6	46	11	62·6	81·9	53·2	61·8	10·1	−1·0	10·8	52	−3	29
Poona ...	1,834	952·3	−0·6	948·5	87·5	+2·6	92	16	52·8	−0·2	47	4 days	60·0	82·3	54·6	62·8	12·4	0	11·6	70	−1	31
Sholapur ...	1,570	961·6	−0·2	957·6	87·5	+2·0	90	1,14,20	56·9	−1·6	52	5 days	68·1	84·1	57·0	63·2	11·4	−0·7	11·3	48	−5	28
Miraj ...	1,817	952·6	−0·7	948·7	86·5	+2·5	89	5 days	56·3	−0·7	49	4	63·3	83·2	55·7	63·6	12·1	−1·1	12·3	61	+1	31
Kolhapur ...	1,885	950·7	...	946·8	85·9	...	89	24	56·7	...	50	4	63·2	82·9	55·4	61·4	11·8	...	9·8	61	...	26
Bijapur ...	1,950	948·3	−0·5	944·5	85·0	+0·8	88	19,20	57·6	−1·0	51	9,11,13	67·7	82·6	58·9	64·5	13·4	−0·6	13·4	58	−3	35
Belgaum ...	2,562	927·8	−0·2	924·7	83·3	+1·3	86	16,17	56·5	−1·9	49	5	63·0	80·3	56·1	60·8	12·6	−0·8	10·3	63	+1	29
Gadag ...	2,131	943·0	−0·4	938·8	85·8	+2·4	89	28	60·5	−0·8	54	11	69·4	81·1	60·9	62·3	14·8	+0·2	11·6	61	−1	32
Hyderabad, North																						
Aurangabad ...	1,905	950·9	−0·5	947·1	85·0	+1·5	88	5 days	55·8	0	50	3,10	64·0	81·8	53·6	61·3	9·9	−1·1	10·2	50	−3	28
Parbhani ...	1,350	968·0	...	964·1	86·5	...	90	20	54·5	...	49	3,11,14	64·6	82·3	54·3	62·3	9·8	...	10·2	48	...	29
Ramagundam ...	527	998·4	...	994·1	86·1	..	88	5 days	54·8	....	51	7 days	68·3	84·0	58·6	64·6	12·5	...	12·0	53	...	31
Nizamabad ...	1,250	972·1	−0·5	968·6	85·5	+1·8	89	18,19	55·6	+0·6	47	4	61·5	82·7	56·1	62·1	13·0	−1·4	9·8	68	+1	26
Bidar ...	2,178	940·8	...	937·7	82·2	+1·1	87	18	60·5	−1·0	58	4 days	67·2	78·2	57·8	59·0	12·5	−1·4	9·3	56	−6	28

* Data not reliable.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.											1730 hrs. I.S.T.									
I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
1	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Madhya Pradesh West *(Contd.)*
5	...	2·5	0·83	...	0·40	30	3	...	2·2	...	0	1	2	1	1	0	1	2	23	4	1	3	2	7	4	4	2	4	Chhindwara
5	...	3·0	1·79	...	0·85	30	4	...	2·4	...	0	2	7	7	1	1	0	0	13	6	11	2	0	3	2	0	2	5	Betul
4	+0·7	2·6	0·19	−0·28	0·17	31	1	+0·2	2·6	...	13	11	1	0	0	1	0	4	1	1	1	11	4	4	0	0	0	10	Nagpur
																													Gujarat
	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Deesa *
0	−0·3	1·3	0	−0·08	0	...	0	−0·1	4·3	+1·6	13	9	0	2	0	0	0	3	4	6	4	0	0	1	0	1	18	1	Surat
5	+0·5	1·3	0	−0·04	0	...	0	−0·1	3·7	+1·7	1	18	9	0	0	0	0	1	2	6	9	4	1	0	0	0	9	2	Ahmedabad
8	+0·3	1·5	0	−0·08	0	...	0	−0·3	4·5	+2·0	2	10	9	4	3	1	0	1	1	10	5	2	2	4	1	5	0	2	Dohad
2	+0·2	1·3	0	−0·02	0	...	0	−0·1	1·7	−0·4	5	8	1	0	0	0	0	0	17	5	7	0	0	0	0	5	14		Baroda
																													Saurashtra & Kutch
1	0	1·1	0	−0·07	0	...	0	−0·1	3·1	−0·5	0	5	0	0	1	0	0	0	25	12	16	0	0	0	0	0	2	1	Bhuj
2	−0·3	1·2	0	−0·09	0	...	0	−0·2	9·0	+1·5	7	19	4	1	0	0	0	0	0	9	9	2	0	0	0	0	11	0	Dwarka
4	+0·4	1·1	0	−0·08	0	...	0	−0·1	8·3	...	0	9	15	4	1	1	0	0	1	16	11	0	0	0	0	2	2	0	Jamnagar
3	−0·1	1·5	0	−0·06	0	...	0	−0·2	6·0	+2·4	3	11	4	2	2	1	0	0	8	11	14	2	1	0	0	0	3	0	Rajkot
1	−0·1	1·0	0	−0·07	0	...	0	−0·2	9·5	...	7	21	0	0	0	0	0	0	3	6	5	0	0	2	5	6	7	0	Veraval
2	−0·2	1·2	0	−0·06	0	...	0	−0·1	2·5	−0·6	4	0	0	0	0	2	4	0	21	2	5	8	1	1	0	0	1	13	Bhavnagar
																													Konkan
0	...	1·2	0	...	0	...	0	...	7·9	...	4	3	12	11	1	0	0	0	0	17	0	0	0	0	0	1	13	0	Dahanu
8	+0·4	1·6	0	−0·08	0	...	0	−0·2	4·8	−1·7	2	11	17	1	0	0	0	0	0	13	0	0	0	0	0	2	16	0	Bombay
7	−0·1	...	0	−0·15	0	...	0	−0·4	2·1	−2·4	0	3	4	1	0	0	0	0	23	...	...	...	...	...	...	...	...	...	Alibag
2	..	1·2	0	...	0	...	0	...	6·3	...	2	10	9	2	0	0	0	1	7	0	0	0	1	0	0	11	19	0	Harnai
0	...	0·9	0	...	0	...	0	...	2·5	...	0	2	28	1	0	0	0	0	0	0	0	0	0	0	0	22	9	0	Devgad
3	...	1·3	0	...	0	...	0	...	...	...	3	2	3	0	0	0	0	1	22	0	0	0	0	0	2	15	0	14	Vengurla
7	−1·0	2·0	0	−1·20	0	...	0	−2·4	5·8	+0·8	0	4	19	8	0	0	0	0	0	0	0	1	0	0	5	18	7	0	Marmagao
2	...	2·3	0	−0·37	0	...	0	−0·4	2·2	...	0	5	20	3	0	0	0	0	3	0	0	0	0	0	0	13	11	7	Honavar
																													Deccan (Desh)
0	...	1·5	0·85	+0·63	0·64	30	2	+1·6	3·3	...	0	1	17	10	0	0	0	0	3	6	6	7	2	0	0	1	2	7	Jalgaon
3	+0·7	2·6	0·69	+0·48	0·44	30	2	+1·6	2·7	−0·2	1	1	0	0	0	1	2	8	18	1	9	2	1	2	1	0	2	13	Malegaon
0	...	...	0	...	0	...	0	...	3·3	...	11	9	1	0	0	0	0	0	10	...	...	...	...	...	...	...	...	...	Deolali
4	0	2·1	0·04	−0·22	0·02	24,30	0	−0·5	3·4	0	0	0	1	2	2	1	0	9	16	0	7	1	2	6	11	0	2	2	Ahmednagar
6	+0·2	1·8	0	−0·15	0	...	0	−0·5	1·1	−2·4	0	0	0	1	2	0	1	0	27	1	2	8	0	0	1	2	3	14	Poona
9	−0·7	1·5	0	−0·41	0	...	0	−0·7	5·5	−0·2	0	4	4	1	11	0	0	0	11	1	0	9	10	3	0	0	0	8	Sholapur
3	+0·5	1·9	0	−0·28	0	...	0	−0·6	4·9	0	2	7	6	2	0	0	2	2	10	0	7	10	6	2	8	2	1	0	Miraj
6	...	1·3	0	...	0	...	0	...	5·3	...	0	4	9	0	0	0	2	0	16	1	10	9	1	1	0	5	1	3	Kolhapur
9	−0·9	1·6	0	−0·25	0	...	0	−0·6	3·0	+0·7	0	3	4	9	4	2	0	1	8	2	7	7	7	2	0	1	0	5	Bijapur
4	−0·4	2·1	0·02	−0·32	0·02	19	0	−0·5	3·6	+0·5	1	3	8	6	0	0	0	0	13	0	8	7	5	3	2	2	0	4	Belgaum
5	−0·3	2·0	0	−0·41	0	...	0	−0·6	4·5	+0·1	0	1	3	9	7	1	3	3	4	0	1	1	2	2	0	6	6	13	Gadag
																													Hyderabad, North
8	+1·1	2·8	0·19	−0·08	0·13	30	1	+0·5	3·9	−4·0	0	5	18	3	1	0	0	0	4	0	1	13	6	6	1	1	0	3	Aurangabad
8	...	2·3	0·03	−0·19	0·03	30	0	−0·4	...	...	1	30	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	21	Parbhani
3	...	1·6	0	...	0	...	0	...	2·6	...	0	2	1	5	1	2	2	3	15	7	6	2	7	1	0	0	0	8	Ramagundam
4	−0·2	1·7	0	−0·18	0	...	0	−0·4	1·5	−0·3	0	0	0	3	0	0	0	0	28	6	7	1	1	0	0	0	0	16	Nizamabad
9	−1·1	1·2	0	−0·24	0	..	0	−0·5	6·9	+1·4	0	0	14	10	6	1	0	0	0	1	12	13	3	1	1	0	0	0	Bidar

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.)

STATION	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity %		
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hyderabad, South																						
Gulbarga ...	1,503	963·8	−0·5	959·8	85·5	+0·1	88	1,16	56·5	−2·2	50	4	63·3	82·9	56·7	62·0	13·0	−0·2	10·4	55	−4	28
Raichur ...	1,311	970·3	−0·2	966·2	84·5	−0·3	87	1,19	62·6	−1·1	57	4,9,10	69·0	82·1	61·4	62·8	15·2	−1·1	10·8	64	−1	29
Hyderabad (Begumpet) ...	1,778	954·8	−0·1	951·6	83·8	+0·3	87	15	54·8	−1·6	49	10	62·8	78·0	58·3	62·5	14·8	0	13·0	76	+5	37
Hanamkonda ...	881	985·5	−0·6	981·9	84·4	+1·2	87	14	59·8	−0·5	54	3,9	68·0	79·7	61·6	63·4	15·8	−0·9	12·6	68	−2	37
Khammameth ...	367	1003·9	...	999·8	85·6	...	88	6,7	60·0	...	54	4,10	66·9	82·8	62·1	66·7	16·8	...	15·1	73	...	39
Coastal Andhradesa																						
Nellore ...	66	1013·3	+0·1	1010·1	85·3	+1·6	89	6	66·5	−1·9	63	6,9,10	72·4	78·2	68·9	70·1	22·6	−1·2	21·5	83	−1	65
Ongole ...	38	1014·6	...	1010·9	84·1	...	89	6	65·6	...	63	2	71·1	78·6	67·6	73·1	21·5	...	25·4	81	...	75
Masulipatam ...	10	1015·9	−0·1	1012·4	81·6	−1·0	86	5,6	65·2	−1·3	62	8,9,10	72·8	77·1	67·3	69·3	20·3	−0·9	20·9	74	−4	66
Kakinada ...	26	1015·5	0	1012·3	80·5	0	87	6	64·1	−2·3	61	4 days	73·6	76·8	66·3	68·4	18·7	−1·0	19·8	67	−5	63
Visakhapatnam ...	126	1011·9	−0·3	1009·0	80·3	−0·4	84	6,8	65·0	−2·9	61	9,10	71·6	75·8	64·2	66·0	17·1	−1·0	17·4	66	+3	58
Calingapatam ...	19	1015·8	−0·4	1012·5	79·0	−1·3	82	6,15	60·7	−2·4	58	4 days	65·1	76·2	61·5	69·1	17·1	−1·9	21·2	80	+2	69
Rentachintala ...	348	1004·3	...	999·9	86·8	+1·0	89	6,7,19	58·7	−3·2	54	8	68·9	83·4	62·9	65·7	16·9	−1·0	13·7	70	−1	35
Rayalaseema																						
Cuddapah ...	428	1001·1	+0·3	995·9	87·3	+1·3	89	4 days	65·9	+0·2	62	5 days	76·4	83·3	64·4	73·5	15·3	−5·7	23·8	50	−26	61
Bellary ...	1,473	964·5	−0·2	960·4	85·2	−0·5	88	,7,19	62·5	+0·6	57	3	68·4	82·6	61·7	63·6	15·8	−0·4	11·5	67	0	32
Kurnool ...	923	983·9	+0·1	979·5	86·4	0	89	5 days	59·0	−1·8	52	3,4	69·7	82·8	62·5	65·5	16·1	−0·6	13·6	65	−6	36
Anantapur ...	1,147	975·5	...	971·1	84·8	...	87	4 days	61·4	...	55	9,10	70·6	82·4	63·8	66·7	17·1	...	15·3	67	...	40
Tamilnad																						
Pamban ...	37	1012·4	+0·3	1009·3	82·2	−0·4	84	3,4,8	75·5	+0·7	74	4 days	78·1	78·4	73·1	72·9	25·6	−2·3	25·2	78	−7	75
Mathurai ...	437	999·0	0	995·1	86·8	+2·1	91	4,5	69·5	−0·7	65	9	76·9	82·5	70·0	71·3	21·9	−1·2	21·1	69	−8	56
Nagapattinam ...	31	1013·2	+0·4	1010·4	81·5	−0·5	83	5,6	73·6	+1·3	68	8	76·7	78·8	71·7	72·6	24·3	−1·0	24·5	76	−5	73
Tiruchi ...	295	1004·5	−0·1	1000·7	85·7	+0·6	90	6	69·3	−0·2	63	9	74·8	81·4	69·1	71·1	21·7	−2·1	21·4	74	−6	59
Coimbatore ...	1,341	968·4	0	964·4	85·9	+1·6	90	4,7	66·9	+0·9	63	9	71·5	83·1	65·9	67·4	19·2	−1·9	15·8	73	−6	41
Salem ...	913	983·1	0	978·7	87·8	+1·7	90	7 days	66·7	+0·8	63	9,11	72·3	83·1	66·5	70·3	19·5	−1·4	19·5	73	−2	51
Kallakurichi ...	416	1000·4	...	996·5	85·0	...	92	5	67·8	...	64	9,19	73·7	81·5	67·7	68·7	20·5	...	18·2	72	...	52
Cuddalore ...	39	1013·2	0	1010·3	82·0	−0·6	85	3,4	69·0	−1·2	64	8,20	74·3	78·1	69·8	71·7	22·9	−1·7	23·6	80	−3	72
Vellore ...	703	990·9	+0·4	986·9	84·8	+2·4	91	5	63·8	−1·0	54	8	71·4	80·7	66·5	68·3	20·0	−1·5	18·0	77	−8	51
Madras ...	51	1013·4	+0·2	1010·4	83·1	−1·0	87	6	68·6	−0·3	63	9	74·5	78·3	69·9	70·3	23·0	−1·6	21·7	79	−5	65
Arogyavaram ...	2,299	937·1	...	933·7	80·0	...	85	5	58·3	...	53	10	66·0	76·3	61·8	64·4	17·2	...	15·8	77	...	51
Malabar And South Kanara																						
Mangalore ...	72	1010·7	−0·2	1007·2	87·6	−1·5	91	9,17	70·3	−0·9	62	10	74·7	82·6	68·7	72·7	21·3	+0·1	22·9	70	+3	61
Kozhikode ...	27	1012·2	+0·1	1008·5	88·9	+1·2	91	17	70·8	−0·5	67	1,10	76·8	84·8	70·5	74·5	22·6	−1·0	21·5	72	−5	61
Palghat ...	319	1002·8	...	998·1	89·9	...	93	8	71·2	...	69	6 days	76·2	86·5	69·6	71·6	21·8	...	19·7	71	...	46
Mysore																						
Chitaldrug ...	2,405	932·6	−0·4	928·9	82·0	−0·4	85	5 days	61·2	−0·6	56	1	67·5	80·0	61·1	62·6	15·8	−0·7	12·3	69	+1	36
Hassan ...	3,149	908·8	...	905·5	80·2	−0·4	83	4,5,7	57·1	−0·5	52	9	63·3	77·1	59·3	61·8	15·6	−1·2	12·6	79	+4	40
Bangalore ...	3,021	913·0	+0·1	909·8	78·4	+0·2	83	6	58·4 (d)	+0·2	53	9	64·1	74·5	59·0	60·5	15·0	−1·6	12·3	73	−5	43
Mysore ...	2,518	929·1	−0·1	925·6	80·6	−1·3	85	6	60·5	−0·6	56	1	64·5	79·0	61·0	63·3	16·9	−0·7	13·5	81	+7	40

(d) Mean of 27 days.

Cloud amount (Oktas)		Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																		STATION
										0830 hrs. I.S.T.										1730 hrs. I.S.T.								
Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																												Hyderabad, South
-0·2	1·6	0	-0·15	0	...	0	-0·3	5·6	+0·7	0	11	19	0	0	0	0	0	1	1	6	13	9	1	0	0	1	0	Gulbarga
-0·7	1·4	0	-0·13	0	...	0	-0·3	5·2	-0·1	3	4	6	14	0	0	1	3	0	2	12	8	9	0	0	0	0	0	Raichur
-0·2	1·6	0	-0·30	0	...	0	-0·4	4·3	+1·2	1	0	2	10	2	0	0	0	16	1	8	9	11	0	0	0	0	2	Hyderabad (Begumpet)
-0·7	1·5	0	-0·23	0	...	0	-0·4	2·9	+0·3	3	1	0	9	8	1	0	1	8	8	6	2	7	4	0	0	0	4	Hanamkonda
...	1·6	0	...	0	...	0	...	2·9	...	12	4	8	2	0	0	0	0	5	3	5	20	1	0	0	0	0	8	Khammameth
																												Coastal Andhradesa
-1·1	2·1	0	-2·86	0	...	0	-3·0	2·7	-0·3	2	0	0	0	0	0	1	13	15	0	9	21	1	0	0	0	0	0	Nellore
...	0·7	0	...	0	...	0	...	3·8	...	11	5	4	0	0	0	0	1	10	2	6	16	5	1	0	0	0	1	Ongole
+0·3	2·1	0	-0·65	0	...	0	-0·9	6·2	+2·0	11	16	3	0	0	0	0	1	0	1	0	14	13	3	0	0	0	0	Masulipatam
+1·4	0·8	0	-0·70	0	...	0	-0·8	7·2	+0·8	3	18	0	0	0	0	0	10	0	0	9	7	15	0	0	0	0	0	Kakinada
-1·4	1·8	0·76	+0·19	0·75	30	1	+0·1	3·4	0	6	4	1	0	0	1	6	5	8	0	9	14	4	3	1	0	0	1	Visakhapatnam
+0·6	2·6	0	-0·54	0	...	0	-0·4	7·0	+1·5	5	0	0	0	0	0	10	16	0	0	3	15	13	0	0	0	0	0	Calingapatam
-0·4	1·8	0	-0·12	0	...	0	-0·4	2·7	-0·5	1	0	7	4	2	4	2	0	11	7	1	16	1	1	0	0	0	5	Rentachintala
																												Rayalaseema
-0·5	2·0	0	-0·81	0	...	0	-1·5	5·9	+1·4	0	1	7	3	0	0	0	0	20	0	1	26	1	0	0	0	0	3	Cuddapah
-0·5	2·3	0	-0·13	0	...	0	-0·3	3·0	+0·6	0	0	1	17	1	0	1	1	10	0	2	8	12	0	0	0	0	9	Bellary
-0·5	2·3	0	-0·13	0	...	0	-0·3	1·9	-0·5	0	0	3	6	1	1	0	0	20	0	3	4	10	2	0	0	0	12	Kurnool
-0·6	1·5	0	-0·20	0	...	0	-0·3	1·9	-0·5	0	0	8	5	2	0	1	0	15	0	6	18	3	0	0	0	0	4	Anantapur
...	1·2	0	-0·25	0	...	0	-0·5	6·2	...																			
																												Tamilnad
0	3·8	3·04	-4·55	0·99	22	7	-2·4	11·5	+0·1	10	8	2	1	0	0	0	10	0	11	15	3	0	0	0	0	2	0	Pamban
-0·6	3·8	0·41	-1·60	0·24	22	2	-1·6	4·2	0	8	6	2	0	0	0	2	4	9	2	13	8	1	0	0	0	0	7	Mathurai
+0·3	4·5	3·88	-7·07	3·04	13	4	-5·1	10·3	+2·0	5	12	0	0	0	0	1	12	1	5	23	1	1	0	0	0	1	0	Nagapattinam
-0·6	3·5	1·11	-1·69	0·94	13	2	-2·5	6·3	+0·9	13	15	1	0	0	0	0	0	2	0	18	13	0	0	0	0	0	0	Tiruchi
-0·1	2·8	0·17	-1·19	0·09	15	0	-2·6	4·0	+1·5	7	15	8	0	0	1	0	0	0	3	14	11	0	1	2	0	0	0	Coimbatore
-0·5	2·0	0·22	-0·81	0·16	13	1	-1·2	5·5	+2·2	0	12	15	0	0	0	2	0	2	0	3	25	1	0	0	0	0	2	Salem
...	4·9	1·20	...	0·80	14	2	...	...	...	10	2	0	0	0	0	0	9	10	0	24	0	0	0	0	0	0	7	Kallakurichi
-0·1	3·4	5·47	-2·02	3·06	14	3	-3·3	6·6	+1·8	14	9	0	0	0	0	0	5	3	3	24	2	2	0	0	0	0	0	Cuddalore
-0·3	2·2	0·14	-2·48	0·07	13,14	0	-3·9	4·3	+2·0	2	1	1	0	0	0	1	1	25	0	12	15	2	1	0	0	0	1	Vellore
+0·1	3·7	0·51	-4·94	0·25	31	2	-3·4	7·9	-0·6	15	3	0	0	0	0	2	11	0	6	19	6	0	0	0	0	0	0	Madras
...	3·2	0·01	...	0·01	13	0	...	3·2	...	1	5	4	4	6	0	0	0	11	0	8	18	0	1	0	0	0	4	Arogyavaram
																												Malabar And South Kanara
+0·1	1·6	0	-0·51	0	...	0	-0·7	4·9	+0·4	0	1	30	0	0	0	0	0	0	0	0	0	0	0	3	9	20	0	Mangalore
-0·2	2·6	0	-1·01	0	...	0	-1·6	5·7	+1·7	1	11	14	2	0	1	0	0	2	1	0	0	0	0	6	15	9	0	Kozhikode
...	2·0	0·01	...	0·01	14	0	...	6·5	...	0	0	25	4	0	0	0	0	2	0	1	23	2	0	2	3	0	0	Palghat
																												Mysore
-0·4	1·8	0	-0·52	0	...	0	-0·8	4·5	-0·1	0	0	17	7	0	2	1	0	4	0	2	23	3	0	1	1	0	1	Chitaldrug
-0·4	2·2	0·02	-0·64	0·02	13	0	-1·1	3·8	+0·8	0	2	15	9	0	1	2	0	2	0	2	18	7	1	1	1	0	1	Hassan
+0·1	2·6	0·03	-0·41	0·02	13	0	-1·2	6·3	+1·5	0	11	12	3	0	0	0	0	5	0	6	16	4	0	0	1	0	4	Bangalore
-1·9	1·8	0·03	-0·37	0·03	13	0	-0·9	6·9	+0·6	2	13	11	1	0	0	0	0	4	3	10	17	0	0	0	0	0	1	Mysore

STATION	Height of bar cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relati humid %	
		Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal	Mean 1730 hrs. I.S.T.	Mean 0830 hrs. I.S.T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Travancore-Cochin																					
Fort Cochin ...	10	1012·7	0	1009·0	86·1	−0·4	89	30	73·1	−1·1	70	9	78·9	82·9	71·0	73·8	22·3	−1·3	24·4	67	−6
Alleppey ...	12	1012·4	...	1008·9	88·6	...	91	12,17,18	71·9	...	68	9	81·5	83·9	74·4	75·8	25·9	...	26·8	71	...
Trivandrum ...	211	1005·3	0	1002·7	87·8	...	92	25	71·7	...	69	6 days	76·5	83·1	71·9	74·5	24·7	−0·1	25·3	79	−1
Nagercoil ...	195	1006·0	...	1003·0	87·7	...	91	31	73·1	...	67	9	79·0	82·5	70·5	73·5	21·6	...	24·2	65	...
Hill Stations Excluding Kashmir																					
Aijal ...	3,599	...	...	...	66·2	...	73	4	...	...	...	...	60·3	59·6	57·9	55·9	15·3	...	14·0	87	...
Shillong ...	4,921	852·7	−0·3	850·3	60·7	−0·9	68	3,5	40·5	+0·5	36	29	54·1	52·1	47·7	49·1	8·6	−0·7	10·7	62	−7
Cherrapunji ...	4,309	872·3	+0·3	869·7	62·1	−0·2	74	5	47·0	−1·0	43	13,14,29	56·5	53·6	50·7	51·5	10·1	−0·1	12·2	68	+8
Darjiling ...	7,432	777·2	−1·0	774·9	50·4	−0·1	57	4,6,7	37·5	+0·9	35	24,27,28	44·1	41·8	41·3	40·5	7·7	+0·7	7·9	81	+15
Kalimpong ...	3,965	882·7	−1·1	880·4	61·6	−0·7	64	6,26	47·7	−0·5	45	7 days	52·3	54·2	50·3	52·1	11·6	+0·7	12·5	87	+14
Katmandu ...	4,388	871·4	...	868·5	66·4	+0·5	72	19,20	34·2	−3·5	28	27	41·7	53·9	40·8	48·3	8·2	+0·4	9·4	93	+7
Muktesar (Kumaon)	7,592	773·1	−0·8	771·9	54·3	+1·1	65	17	38·0	−0·4	28	31	42·6	44·3	32·8	36·6	2·9	−1·0	4·7	35	−4
Mussooree ...	6,699	798·1	...	797·0	54·3	+0·7	66	16	39·8	+0·2	31	26	45·5	44·5	38·0	39·8	5·3	+0·3	7·0	51	+6
Simla ...	7,224	782·6	−0·6	782·0	51·2	+0·6	60	17	38·5	−0·8	25	25	43·9	44·1	33·1	36·0	2·5	−1·0	4·4	31	−3
Abu ...	3,945	883·6	−0·4	882·0	68·4	0	75	17	46·5	−6·0	38	27	54·1	60·9	41·4	45·5	3·8	−2·7	4·3	29	−15
Pachmarhi ...	3,528	897·8	−0·6	895·4	73·3	+2·0	79	18	46·5	+0·7	37	3	54·3	67·7	50·1	55·9	10·6	+0·5	10·0	74	+12
Mahabaleshwar ...	4,534	865·3	−0·1	863·5	76·8	+4·1	82	17	57·7	+1·2	53	5	61·6	69·2	51·8	57·4	9·2	−0·2	11·3	50	−5
Mercara ...	3,781	887·5	0	885·2	75·1	+0·2	78	4	56·5	−1·2	53	5,18	61·1	72·2	57·5	61·0	14·7	−1·0	13·8	80	−3
Kodaikanal ...	7,688	772·3	+0·5	770·7	62·2	+0·5	72	19	46·4	−0·8	41	9	54·2	54·7	46·3	50·8	7·9	−1·3	11·3	59	−5
Ootacamund ...	7,364	780·8	−0·2	779·4	67·3	+2·3	74	12,19	40·5	−3·4	35	5,19	49·8	58·3	44·3	51·9	7·9	−1·1	10·9	67	+3
Coonoor ...	5,730	828·2	...	...	63·8	−1·8	68	10,28	44·9	−4·3	40	20	61·9	...	56·6	...	13·8	+1·8	...	73	+1
Tibet																					
Lhasa ...	12,090	651·5	...	...	52·2	...	61	16	16·2	...	9	31	30·6	...	29·5	...	5·3	....	...	90	...
Gyantse ...	13,110	624·4	...	...	47·9	+3·3	59	14	10·4	+1·0	1	29	28·5	...	22·3	...	2·3	−0·7	...	42	−16
Ceylon																					
Colombo ...	24	1011·7	0	1008·6	85·5	−0·9	89	12	71·8 (a)	−0·7	68	9,16	76·3	80·3	72·3	74·8	25·3	−0·6	27·0	81	−5
Trincomalee ...	24	1012·3	+1·0	1009·7	80·8	−1·7	84	6,14,15	75·3	+0·9	71	8	78·2	78·5	73·9	73·8	26·7	−0·5	26·4	81	−4
Hambantota ...	61	1010·0	+0·2	1007·2	84·3	−0·3	87	4 days	72·5	−0·3	68	9	77·2	79·8	73·2	76·1	26·1	+0·3	29·1	82	−5
Mannar ...	12	1013·1	...	1009·8	82·7	...	85	6,23	74·8	...	71	16	77·4	80·1	73·9	74·1	27·0	...	26·1	84	...

(a) Mean of 30 days.

Cloud amount (Oktas)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																	STATION
											0830 hrs. I.S.T.										1730 hrs. I.S.T.								
Mean (0830 hrs. I.S.T.)	Departure from normal	Mean 1730 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Travancore–Cochin
4·4	+1·8	5·0	0·01	−1·59	0·01	13	0	−2·5	5·5	+1·9	3	12	12	4	0	0	0	0	0	0	2	0	0	0	7	18	4	0	Fort Cochin
2·4	...	2·2	0·40	...	0·25	28	2	...	5·8	...	1	9	14	6	0	1	0	0	0	0	0	0	0	0	1	14	16	0	Alleppey
2·2	−1·4	2·6	1·04	−1·43	0·62	13	3	−0·7	3·5	+0·9	5	15	4	5	0	0	0	0	2	0	0	0	1	3	21	4	2	0	Trivandrum
3·3	...	4·3	1·80	...	0·92	13	4	...	6·7	...	2	24	0	0	0	0	1	0	4	1	12	2	0	0	8	7	0	1	Nagercoil
																													Hill Stations Excluding Kashmir
1·1	...	0·9	0	...	0	...	0	...	3·1	...	4	4	16	1	3	1	1	1	0	3	1	1	0	1	4	6	9	6	Aijal
1·5	+0·1	4·7	0·01	−0·27	0·01	9	0	−0·9	1·3	+0·1	0	0	2	3	0	4	3	1	18	1	1	0	0	0	1	1	1	26	Shillong
2·9	+1·1	3·3	0	−0·49	0	...	0	−0·7	5·1	+2·6	0	15	6	0	2	8	0	0	0	1	3	3	0	3	12	3	3	3	Cherrapunji
4·8	+2·2	5·1	0	−0·27	0	...	0	−0·7	4·0	+3·1	0	3	19	4	0	0	3	0	2	0	0	5	1	1	1	17	0	6	Darjiling
1·6	−0·6	3·3	0	−0·32	0	...	0	−0·7	5·3	−1·5	1	0	0	4	0	0	0	17	9	1	0	0	23	2	0	0	5	0	Kalimpong
5·6	−0·5	3·3	0·29	−0·04	0·29	25	1	+0·2	1·6	0	1	1	1	1	1	0	0	0	26	5	0	1	2	0	0	0	3	20	Katmandu
1·9	−0·4	3·3	0·16	−0·89	0·17	25	1	−0·8	8·4	+3·2	0	4	7	5	2	0	7	4	2	0	2	3	3	3	4	11	3	2	Muktesar(Kumaon)
3·1	+0·4	3·1	0·87	−0·51	0·64	26	2	−0·6	5·3	+0·8	5	5	0	4	8	3	0	0	6	3	4	0	5	11	5	0	0	3	Mussooree
2·8	0	3·4	0·35	−0·89	0·35	25	1	−1·4	2·6	−0·4	3	1	1	9	9	0	0	1	7	2	4	1	3	7	6	1	0	7	Simla
1·7	+0·3	1·4	0	−0·12	0	...	0	−0·3	2·1	−1·1	2	1	0	0	0	0	1	0	27	3	4	0	0	0	1	1	0	22	Abu
2·4	+0·7	2·4	1·80	+1·37	0·71	27	5	+4·2	2·3	+0·5	1	0	1	0	6	7	3	1	12	8	5	1	0	2	1	0	4	10	Pachmarhi
1·3	−0·1	1·4	0	−0·26	0	...	0	−0·6	5·6	−1·5	0	9	14	5	1	1	1	0	0	1	6	4	1	0	6	1	12	0	Mahabaleshwar
2·4	−1·8	2·6	0	−0·72	0	...	0	−1·2	5·7	+1·1	0	11	11	0	0	0	0	1	8	0	10	10	0	0	0	2	3	6	Mercara
2·1	−1·4	4·2	3·64	−1·52	2·91	13	3	−4·1	8·1	−0·1	3	6	2	13	3	2	0	2	1	1	4	2	7	3	0	1	8	5	Kodaikanal
1·3	−1·7	2·9	1·48	−0·24	0·83	13	2	−1·7	1·8	−1·1	1	5	3	1	0	0	0	0	21	2	8	1	0	3	1	0	0	16	Ootacamund
3·0	−1·2	...	1·43	−4·15	0·66	14	4	−2·6	3·6	+0·4	7	0	0	8	7	3	0	4	0	...	...	...	...	...	...	...	...	...	Coonoor
																													Tibet
0·3	...	...	0	...	0	...	0	...	0·1	...	0	0	0	0	0	0	0	0	31	...	...	...	...	...	...	...	...	...	Lhasa
0·7	−0·6	...	0	−0·01	0	...	0	0	3·3	−0·2	0	0	2	5	2	0	0	0	22	...	...	...	...	...	...	...	...	...	Gyantse
																													Ceylon
3·8	−0·6	5·6	4·27	−1·31	1·30	15	7	−0·6	...	...	4	19	6	1	0	0	0	0	1	11	4	3	0	1	1	2	9	0	Colombo
5·8	+1·0	6·2	8·63	−5·03	3·30	2	7	−6·6	..	..	9	12	1	1	0	1	0	3	4	12	14	2	0	0	0	1	2	0	Trincomalee
5·4	+1·7	6·4	1·86	−3·13	0·76	7	5	−3·3	...	...	14	12	1	0	0	0	0	4	0	2	15	9	1	1	3	0	0	0	Hambantota
4·5	...	5·0	4·16	...	1·29	3	5	...	...	...	5	18	6	1	0	0	0	0	1	9	20	2	0	0	0	0	0	0	Mannar

TABLE III.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 4TH CLASS STATIONS— DECEMBER 1950

STATION	Maximum temperature, °F				Minimum temperature, °F				Mean dry bulb temperature 0830 hrs. I.S.T. °F	Mean wet bulb temperature 0830 hrs. I.S.T. °F	Vapour pressure, millibars		Relative humidity %		Mean cloud amount, 0830 hrs. I.S.T.	Rainfall, inches				Number of rainy days (0·10" or more)		Wind	
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 0830 hrs. I.S.T.	Departure from normal	Mean 0830 hrs. I.S.T.	Departure from normal		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal	Resultant direction 0830 hrs. I.S.T.	Velocity in
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Assam																							
Lumding ...	75·8	+2·8	82	7	51·7	+1·0	45	19	63·1	59·9	16·4	+1·1	83	-3	...	0	-0·14	0	0	0	-0·4	...	...
Jammu and Kashmir																							
Jammu ...	69·4	+1·4	75	10	45·6	-3·5	41	22,24	48·5	43·5	7·6	-0·8	64	+2	2·6	0	-1·24	0	...	0	-2·6	N45E	...
Kargil (R) ...																							
Mysore																							
Balehonnur ...	79·7	+0·8	88	15	57·6	-1·0	53	9	63·9	59·7	15·8	-0·4	77	+1	...	0	-0·47	0	...	0	-0·8	...	...
Sikkim ...																							
Lachen ...	...	...	...	...	31·0	...	21	12	39·7	...	...	...	...	...	...	0·59	...	0·42	31	2	...	...	...
Tibet																							
Yatung (Chumbi)	48·4	+1·6	58	15	20·7	-0·4	16	28	31·9	29·6	4·8	+0·6	80	-3	0·5	0·30	-0·07	0·30	25	1	+0·2	...	...

(R) Register not received.

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 0830 HRS. I. S. T. (0300 HRS. G. M. T.) AT 5TH CLASS STATIONS— DECEMBER 1950

Division	Station	Rainfall, inches				Number of rainy days (0.10" or more)		Division	Station	Rainfall, inches				Number of rainy days (0.10" or more)	
		Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure from normal			Total of the month	Departure from normal	Heaviest fall in 24 hrs.	Date	Total in the month	Departure
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	
Assam ...	Mawsynram ...	0	...	0	...	0	...	Jammu & Kashmir	Sonamarg ...	2·90	-2·72	2·14	20	3	-4
West Bengal ...	Bankura ...	0	-0·11	0	...	0	-0·3		Gurez ...	0·59	-2·18	0·30	20	1	-5
Bihar ...	Muzaffarpur ...	0	-0·12	0	...	0	-0·3	Deccan (Desh) ...	Khandala ...	0	-0·12	0	...	0	0
	Chapra ...	0	-0·14	0	...	0	-0·4	Tamilnad ...	Palayamcottai ...	4·15	-0·09	1·35	13	5	-0
	Arrah ...	0	-0·17	0	...	0	-0·5	Sikkim ...	Thangu ...	0·18	...	0·10	25	1	..
Punjab (I) ...	Dalhousie ...	0·92	-2·93	0·92	20	1	-3·5		Lachung ...	0·07	-0·56	0·04	27	0	-1
	Kyelang ...	0·27	-0·85	0·13	17	2	-0·9		Chungthang ...	0·08	...	0·08	25	0	..
	Gondla ...	1·23	...	0·33	18	4	...								
	Koksar ...	1·21	...	0·40	25	4	...								
	Kothi ..	0·36	...	0·15	20	1	...								
	Dharampore ...	0	-1·78	0	...	0	-2·5								
	Kharsali ...	1·48	...	0·73	26	4	...								
	Rana ...	0·85	...	0·35	25	3	...								
	Jamuna Chetty ...	1·40	...	1·00	26	3	...								

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Note :—Data upto 9·0 Km. a. s. l. are given under Table A and data above 9·0 Km. under Table B.

In Tables A and B

n represents the number of observations.

V represents the mean wind speed in m./second irrespective of direction.

v represents the resultant mean velocity in m./second.

D represents the direction of the resultant mean wind in degrees East of North.

For the co-ordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly report—January 1950 and subsequent issues.

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

DECEMBER 1950

STATION	AHMEDABAD												ALLAHABAD											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·6	2·1	23	31	2·2	2·0	46	31	2·2	1·6	30	31	1·3	0·6	260	31	1·6	0·6	255	31	2·0	1·3	293
0·15 a.g. ...	31	9·1	7·8	49	31	10·5	9·9	58	31	2·9	2·1	21	30	5·0	2·2	232	31	4·7	2·5	328	31	3·2	1·6	311
0·6 a.s.l. ...	31	5·8	4·3	52	31	6·2	4·9	63	30	3·2	2·3	28	29	4·8	2·5	310	30	5·0	2·8	318	31	3·6	2·0	301
1·0 ,, ...	31	3·6	0·9	51	31	3·8	2·1	19	30	3·3	1·8	19	29	5·1	3·4	285	29	5·9	3·3	295	28	4·9	3·5	293
1·5 ,, ...	31	3·9	1·6	256	31	4·3	2·1	294	31	4·3	2·4	267	27	6·0	4·7	285	29	6·7	4·9	288	27	6·6	5·5	288
2·0 ,, ...	31	5·9	4·5	251	31	5·7	4·2	260	31	6·0	4·9	251	27	6·8	5·9	283	27	7·4	6·6	290	27	7·7	7·1	288
2·5 ,, ...	31	7·2	5·7	250	31	6·9	5·8	250	31	7·7	6·9	251	26	8·1	7·3	282	27	8·4	7·6	286	27	9·0	8·4	287
3·0 ,, ...	31	8·9	7·2	250	31	8·8	8·0	248	31	9·8	9·1	251	23	10·7	9·9	284	27	9·7	8·9	277	27	10·9	10·3	282
4·0 ,, ...	6	12·3	10·9	266	31	12·5	11·5	255	30	12·4	11·6	259	5	11·7	10·6	274	24	13·1	12·3	278	25	14·6	13·7	278
5·0 ,, ...	2	15·0	15·0	248	28	15·2	13·5	259	28	16·1	15·0	262					19	16·1	15·7	273	22	19·0	18·1	282
6·0 ,, ...					25	18·8	17·4	258	27	19·1	18·0	262					8	16·8	15·4	262	21	21·4	20·6	273
7·5 ,, ...					14	23·7	22·5	266	21	26·3	24·8	264					5	21·1	20·6	245	17	27·6	27·0	264
9·0 ,, ...					3	26·0	25·9	279	13	29·4	28·1	262					1	28·0	28·0	255	9	31·5	29·4	254

STATION	AMBALA												ANANTAPUR											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·3	2·1	318	31	1·6	1·4	318	31	2·5	1·6	293	31	3·1	2·6	97	31	1·4	0·9	118	31	3·2	3·0	81
0·15 a.g. ...	31	7·2	6·0	329	31	6·8	4·9	333	31	4·4	2·8	298	31	5·3	4·9	105	31	3·9	3·4	108	31	4·2	4·1	75
0·6 a.s.l. ...	31	6·3	5·0	325	31	7·0	4·5	326	31	4·7	2·9	298	31	6·2	5·9	106	31	4·9	4·4	109	31	4·0	3·9	77
1·0 ,, ...	31	5·1	1·9	314	31	5·8	2·6	316	31	4·6	1·9	308	31	6·3	5·9	95	31	6·7	6·1	101	31	4·6	4·0	89
1·5 ,, ...	31	5·1	0·7	230	31	5·4	0·2	6	30	5·9	0·5	138	31	5·1	4·0	83	31	5·7	4·7	83	31	5·1	4·4	90
2·0 ,, ...	31	5·7	2·0	169	31	5·9	2·5	146	30	6·3	2·3	140	31	5·8	3·6	93	31	5·9	3·8	80	31	6·1	5·0	90
2·5 ,, ...	30	6·0	3·2	180	31	5·9	3·7	152	29	5·6	2·2	168	30	5·5	3·5	85	31	6·0	3·9	80	31	6·1	4·3	84
3·0 ,, ...	26	5·7	2·3	212	30	6·6	3·4	174	29	6·2	2·7	191	26	5·1	3·2	77	31	5·8	3·9	84	31	6·0	3·2	90
4·0 ,, ...					29	7·7	4·9	241	28	7·3	5·0	255	19	5·6	2·1	127	30	6·1	0·7	150	30	6·1	0·2	193
5·0 ,, ...					25	12·5	10·1	253	27	11·8	9·8	259	6	5·4	1·3	111	30	5·9	2·4	226	30	7·2	2·2	247
6·0 ,, ...					18	17·1	15·0	261	22	17·0	15·2	262	4	6·1	2·6	6	28	7·3	3·8	246	29	7·4	2·6	235
7·5 ,, ...					2	25·3	25·3	247	10	22·3	21·4	265					21	9·4	7·2	238	22	9·3	4·7	244
9·0 ,, ...									1	34·0	34·0	260					14	12·7	10·5	236	19	10·6	8·3	231

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

DECEMBER 1950

TATION	ASANSOL												BANGALORE											
ne in I.S.T.	0230				0730				1430				0230				0730				1430			
eight in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
face ...	31	1·5	1·1	306	31	1·6	1·4	296	31	1·8	1·2	310	31	3·1	2·8	84	31	2·8	2·5	86	31	2·8	2·4	93
5 a. g. ...	31	4·7	3·1	337	31	4·9	3·8	327	31	3·6	2·8	316	29	7·2	6·2	89	31	7·2	6·1	83	31	4·4	3·6	86
a.s.l. ...	31	4·4	3·4	322	31	4·9	3·9	334	31	3·8	3·1	314												
,, ...	31	5·1	4·3	302	31	5·8	4·2	317	31	4·3	3·6	310	31	5·2	4·4	88	31	5·0	4·5	83	31	4·2	3·4	87
,, ...	31	6·7	5·8	300	30	6·6	5·4	303	31	6·4	5·7	308	24	6·1	4·6	89	30	6·9	5·5	92	31	4·0	3·5	87
,, ...	24	7·2	6·8	305	29	7·6	6·7	303	31	8·6	7·8	302	21	5·1	3·9	79	29	6·2	4·8	82	30	4·9	4·2	87
,, ...	14	7·7	7·3	294	27	8·3	7·5	301	30	10·7	9·9	296	18	5·2	4·2	64	29	6·0	4·5	82	28	5·2	3·8	75
,, ...	11	9·5	8·2	284	25	10·5	9·6	288	30	12·5	11·7	291	18	5·1	4·1	79	27	5·6	3·8	77	27	6·2	3·4	76
,, ...					13	11·4	10·6	276	29	16·2	15·3	281					25	6·3	2·0	86	26	6·3	2·0	103
,, ...					3	11·2	11·0	218	23	18·6	17·8	271					24	6·6	0·3	112	25	6·2	0·8	135
,, ...					2	14·7	14·7	223	15	20·7	20·2	265					23	6·8	1·0	275	22	7·1	1·5	185
,, ...					1	12·5	12·5	240	3	22·8	21·2	281					20	9·0	2·8	242	19	8·5	4·6	233
,, ...									2	30·0	29·5	285					15	9·8	8·1	219	18	11·1	9·5	215

TATION	BAREILLY								BHAGALPUR								BHOPAL							
ne in I.S.T.	0730				1430				0730				1430				0230				0730			
eight in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
face ...	31	0·9	0·4	310	31	2·0	0·8	305	31	0·9	0·7	250	31	1·8	1·3	288	31	1·9	1·4	52	31	1·7	1·2	60
5 a. g. ...	30	6·2	4·0	317	29	4·1	2·8	293	31	5·0	3·7	279	30	4·3	3·8	297	29	5·3	3·4	88	29	5·9	3·9	89
a.s.l. ...	30	6·1	3·9	306	29	4·5	2·8	296	31	5·4	4·2	308	29	4·1	3·3	296	29	5·8	4·2	81	29	4·8	3·2	89
,, ...	30	5·8	3·2	309	29	5·2	3·1	304	31	5·9	4·3	304	30	5·3	4·3	290	28	3·6	1·4	120	28	4·8	0·9	152
,, ...	30	5·9	2·3	301	30	5·6	2·5	293	31	7·9	5·1	295	29	7·5	6·4	296	26	5·1	3·3	241	28	6·1	3·0	243
,, ...	30	6·3	2·8	269	29	6·0	3·0	275	30	9·1	7·1	297	28	9·7	8·8	294	25	6·5	5·1	257	28	7·1	5·1	259
,, ...	30	6·3	3·6	269	29	6·5	4·0	270	28	10·5	9·3	295	28	12·3	11·9	294	24	7·4	6·5	260	28	7·7	6·7	261
,, ...	28	6·6	5·0	267	29	8·0	5·8	277	24	11·9	11·5	293	25	13·8	13·3	290	24	9·5	8·5	273	28	9·1	8·0	267
,, ...	26	11·0	9·8	268	27	11·8	10·1	275	14	13·9	13·2	279	14	14·6	13·6	279	5	12·1	11·2	273	25	12·5	11·1	266
,, ...	8	11·5	10·1	270	24	16·6	14·7	269	7	14·9	13·5	266	11	18·6	17·7	272	1	19·0	19·0	300	23	14·4	12·7	267
,, ...	3	16·8	15·9	263	16	19·5	16·9	262	1	12·5	12·5	310	5	17·2	16·8	258					20	17·2	15·5	263
,, ...	1	24·0	24·0	290	5	27·8	22·3	279													13	21·0	20·2	255
,, ...					3	27·0	26·3	244													5	25·7	24·7	249

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

DECEMBER 1950

STATION	BHOPAL				BHUJ												BIKANER							
Time in I.S.T.	1430				0230				0730				1430				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	31	1·8	0·5	358	31	0·4	0·4	24	31	0·1	0·1	14	31	2·9	2·5	29	31	0·6	0·5	131	30	1·1	0·9	
0·15 a.g. ...	29	3·1	0·7	333	31	6·5	6·0	22	31	5·2	4·8	36	31	5·6	5·2	24	31	5·0	4·1	87	30	3·1	2·5	
0·6 a.s.l. ...	31	3·1	0·9	344	31	7·8	7·2	31	31	7·8	7·2	36	31	5·0	4·5	26	31	4·4	2·9	43	30	3·4	2·5	
1·0 ,, ...	28	3·1	1·1	268	31	5·3	4·0	37	31	6·4	5·3	29	31	5·2	4·4	28	31	4·6	3·3	6	31	3·5	2·3	
1·5 ,, ...	28	4·9	3·3	261	31	4·5	2·0	341	31	5·4	2·9	4	31	4·7	2·5	358	31	5·0	3·7	353	31	3·4	1·8	
2·0 ,, ...	28	6·9	5·6	267	30	4·8	3·0	277	31	5·2	3·6	289	31	5·8	3·5	279	31	4·9	3·2	332	31	4·2	2·7	
2·5 ,, ...	28	8·5	7·5	264	30	6·9	5·7	268	31	6·7	4·4	271	31	7·4	6·1	266	31	5·6	3·7	288	31	6·4	5·0	
3·0 ,, ...	27	9·9	8·9	266	30	8·8	7·7	263	31	8·5	7·2	259	31	9·0	7·8	262	31	7·9	5·8	280	31	8·4	7·4	
4·0 ,, ...	26	13·0	11·2	264	30	12·4	11·2	259	31	12·7	11·7	259	31	12·9	11·8	262	27	13·2	11·9	262	31	13·9	13·1	
5·0 ,, ...	22	15·7	13·8	268	28	15·4	14·2	258	31	16·1	15·2	260	31	16·7	15·5	265	20	18·1	17·0	259	28	20·5	19·4	
6·0 ,, ...	21	17·6	16·3	266	19	18·0	16·8	263	30	19·8	19·0	262	30	20·3	18·9	265	6	15·7	14·9	262	19	23·3	22·0	
7·5 ,, ...	16	22·9	21·4	261	1	12·5	12·5	295	21	23·4	22·6	264	29	28·0	26·8	260	3	15·5	15·2	272	5	24·2	23·7	
9·0 ,, ...	8	26·9	26·0	249					12	25·6	24·6	264	25	31·2	29·6	261								

STATION	BOMBAY												CALCUTTA											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface ...	31	0·4	0·2	45	31	0·8	0·6	76	31	4·5	4·1	294	31	1·3	0·5	288	31	1·3	0·8	341	31	2·4	9·5	
0·15 a.g. ...	30	3·1	2·6	28	31	3·4	2·7	44	31	3·1	2·5	303	31	4·9	1·8	339	31	4·6	2·7	360	31	3·3	2·2	
0·6 a.s.l. ...	30	3·9	3·0	26	31	4·0	2·9	71	31	2·5	0·7	79	31	5·4	3·6	336	31	4·7	3·1	349	31	3·6	2·6	
1·0 ,, ...	31	3·3	0·7	99	31	3·7	2·1	88	31	2·6	0·6	103	31	5·2	3·9	330	31	4·8	3·3	333	31	4·6	3·7	
1·5 ,, ...	31	4·7	3·2	159	31	3·5	2·2	174	31	3·2	1·0	178	31	6·4	5·6	313	31	6·1	5·2	314	31	6·9	6·1	
2·0 ,, ...	31	5·4	4·4	165	31	4·6	3·4	181	31	4·5	2·2	197	31	7·9	6·8	309	30	7·8	7·1	312	31	8·6	8·2	
2·5 ,, ...	31	5·3	3·4	198	31	5·0	29·	203	30	4·8	2·3	207	26	8·8	7·8	302	29	8·6	7·7	303	31	10·4	9·9	
3·0 ,, ...	31	5·9	4·2	225	31	6·2	4·1	238	31	6·0	3·5	233	19	10·1	9·3	296	29	10·5	9·7	292	31	11·7	11·1	
4·0 ,, ...	13	7·7	5·2	250	30	7·7	5·4	251	29	8·1	5·4	250	1	8·5	8·5	280	21	11·6	10·2	276	27	14·3	13·6	
5·0 ,, ...	4	10·4	7·7	253	27	9·7	8·3	253	28	9·6	7·9	257					10	10·5	9·1	275	24	16·9	16·2	
6·0 ,, ...	2	12·5	12·5	227	25	12·9	11·9	256	28	12·7	11·5	262					4	10·5	10·0	263	23	19·6	18·3	
7·5 ,, ...					11	17·8	17·1	258	25	18·6	17·6	260					3	18·2	17·5	253	11	24·1	23·1	
9·0 ,, ...					6	20·3	19·2	251	18	24·5	23·4	253					1	25·5	25·5	255	6	30·5	28·8	

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

DECEMBER 1950

STATION	COCHIN (Willingdon Island)												COOCH BEHAR								CUTTACK			
Time in I.S.T.	0230				0730				1430				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	1·2	1·0	72	31	1·7	1·5	65	31	3·1	2·7	271	31	1·4	1·1	63	31	1·4	0·5	153	31	0·3	0·3	311
0·15 a.g. ...	31	3·0	1·3	70	31	4·1	3·7	72	31	3·2	2·9	271	30	4·9	4·5	79	31	2·6	0·8	152	31	3·3	1·6	297
0·6 a.s.l. ...	31	1·7	1·2	77	32	3·1	1·7	57	31	2·5	1·5	5	30	4·8	4·0	92	31	2·9	1·4	151	31	4·3	1·0	344
1·0 ,, ...	31	2·9	1·8	87	31	3·0	1·8	57	31	3·0	2·3	59	29	4·8	3·4	91	31	3·6	1·0	165	31	4·2	1·8	7
1·5 ,, ...	30	3·4	2·8	66	31	4·3	3·0	65	31	3·8	2·4	78	28	5·4	3·1	93	30	5·4	0·2	121	31	4·3	2·1	17
2·0 ,, ...	26	3·9	2·7	77	29	4·2	2·3	80	31	4·8	3·0	91	28	6·5	2·2	85	30	7·2	1·6	317	29	4·4	2·4	344
2·5 ,, ...	17	3·9	0·9	73	28	4·2	2·5	86	31	5·3	3·1	78	27	7·5	1·5	323	29	9·0	5·5	292	27	5·3	4·1	320
3·0 ,, ...	13	5·1	2·8	101	28	5·3	3·8	80	30	6·1	3·3	82	25	10·7	8·6	281	27	11·9	10·6	284	24	6·2	4·5	302
4·0 ,, ...	2	7·0	6·5	126	21	4·8	2·9	93	29	6·2	3·3	69	18	30·3	19·9	277	18	84·4	17·9	275	12	8·1	7·5	281
5·0 ,, ...					20	5·5	2·6	96	27	6·2	3·0	82	8	17·1	16·1	269	12	18·5	17·6	270				
6·0 ,, ...					15	7·5	1·4	55	25	6·7	2·3	111	6	20·4	18·5	259	10	20·1	19·3	268				
7·5 ,, ...					8	9·2	4·6	232	21	8·3	1·9	119	4	29·1	15·3	254	5	27·3	24·9	249				
9·0 ,, ...					1	15·5	15·5	210	15	9·0	5·1	181					2	32·9	27·1	261				

STATION	CUTTACK								DEOLALI				DIBRUGARH								GADAG			
Time in I.S.T.	0730				1430				0730				0730				1430				0230			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	0·4	0·3	339	31	0·4	0·1	329	23	0·9	0·8	32	31	1·5	1·1	58	31	1·8	1·3	22	31	2·8	1·8	111
0·15 a.g. ...	31	3·4	2·3	333	31	2·3	1·0	349	23	3·5	3·1	92	26	3·2	2·1	55	30	2·1	1·4	29	31	7·7	6·1	111
0·6 a.s.l. ...	31	4·8	2·3	35	31	2·6	1·2	345	23	2·1	1·8	77	26	3·3	2·8	48	30	2·4	1·3	78				
1·0 ,, ...	31	4·7	2·8	39	31	3·2	1·5	347	23	5·7	3·7	123	26	3·1	2·6	63	30	2·8	0·5	107	31	7·8	6·8	111
1·5 ,, ...	31	4·1	2·1	26	31	3·8	2·6	331	23	4·8	3·2	148	24	2·7	1·6	92	29	2·8	1·2	199	31	6·1	4·8	101
2·0 ,, ...	31	4·2	2·0	353	31	5·2	4·1	319	23	4·1	2·7	190	24	3·3	1·0	119	27	3·4	2·6	193	31	4·7	3·2	95
2·5 ,, ...	31	4·8	3·3	315	31	6·1	5·1	303	23	4·8	2·6	222	22	3·6	0·6	111	26	4·4	3·1	190	31	4·9	2·4	106
3·0 ,, ...	31	5·4	3·8	290	31	7·0	5·8	295	22	5·6	3·8	244	20	3·5	0·6	214	26	4·4	2·5	302	31	5·2	1·1	124
4·0 ,, ...	30	7·6	9·5	279	30	9·0	7·9	280	22	7·7	5·8	252	16	7·9	6·0	261	21	8·1	5·8	251	27	6·2	1·1	308
5·0 ,, ...	26	9·2	8·1	263	27	11·1	9·8	268	22	10·2	8·4	257	10	24·7	23·9	264	18	17·4	17·1	262	23	6·2	2·0	330
6·0 ,, ...	21	13·5	10·9	257	26	14·5	13·4	265	19	13·8	12·4	264	7	21·5	21·0	270	12	23·1	23·6	267	12	5·5	1·9	245
7·5 ,, ...	8	15·1	12·9	261	23	18·6	17·5	259	16	17·4	16·4	258	2	31·0	20·5	266	9	30·9	29·2	275				
9·0 ,, ...	4	18·9	18·9	253	21	25·4	24·2	258	11	22·4	21·2	250	9	40·0	40·0	280	6	42·5	41·7	280				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

DECEMBER 1950

STATION	GADAG								GAYA								GOPALPUR			
Time in I.S.T.	0730				1430				0230				0730				1430				0730			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·5	2·2	117	31	3·6	3·1	100	31	1·5	1·1	172	31	1·8	1·6	168	31	3·6	3·1	297	31	4·3	4·2	335
0·15 a.g. ...	31	7·2	6·5	128	31	4·5	3·8	99	31	4·2	2·8	304	31	4·1	2·4	253	31	4·1	3·6	313	31	5·4	4·7	334
0·6 a.s.l. ...									30	4·7	3·9	307	30	4·7	3·5	312	31	4·3	3·7	304	31	4·4	2·4	44
1·0 ,, ...	31	7·8	6·9	117	31	4·5	3·8	94	30	5·4	4·7	293	30	5·3	4·1	293	31	4·8	4·2	288	31	5·3	3·8	47
1·5 ,, ...	31	5·9	4·9	93	31	4·1	3·4	93	29	6·6	6·0	299	30	7·3	5·7	293	30	6·7	5·9	291	31	5·3	3·6	47
2·0 ,, ...	31	5·7	4·5	90	31	5·1	4·1	96	27	8·1	7·5	290	30	8·3	7·1	297	30	8·6	7·4	289	30	4·9	2·8	28
2·5 ,, ...	31	5·5	3·8	94	31	5·1	2·7	101	18	7·3	7·1	280	29	9·3	8·3	298	30	10·5	9·5	286	27	5·0	1·9	11
3·0 ,, ...	31	5·5	1·9	113	31	5·7	1·5	104	16	8·2	7·5	277	28	10·7	9·8	284	30	12·6	11·7	287	23	4·7	2·0	318
4·0 ,, ...	24	5·9	1·1	248	31	6·8	0·7	249	1	7·0	7·0	230	19	12·7	12·1	270	31	14·8	13·9	275	17	5·4	3·1	278
5·0 ,, ...	29	6·3	3·3	250	29	6·5	3·0	253					8	15·4	14·1	253	13	16·3	15·6	270	14	6·5	4·8	264
6·0 ,, ...	28	8·9	5·6	253	29	8·6	5·1	245					6	16·8	16·1	253	7	17·2	16·6	257	11	10·3	8·0	255
7·5 ,, ...	26	12·1	9·1	257	25	12·3	9·4	254					2	12·2	11·8	239	3	20·5	19·3	251	6	11·3	9·6	255
9·0 ,, ...	19	14·5	13·1	248	19	16·4	15·6	248									1	20·0	20·0	285	4	11·5	10·9	253

STATION	GOPALPUR				GORAKHPUR								HYDERABAD											
Time in I.S.T.	1430				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·7	2·7	102	31	1·0	0·6	260	31	2·0	1·5	262	31	1·5	1·3	111	31	0·8	0·7	121	31	2·9	2·3	100
0·15 a.g. ...	31	4·3	3·7	96	31	4·9	3·1	311	31	3·4	2·4	272	31	7·2	6·4	111	31	6·1	5·6	120	31	4·3	3·3	95
0·6 a.s.l. ...	31	3·5	2·3	20	31	4·7	2·9	288	31	3·8	2·5	285	31	4·4	3·8	102	31	2·9	2·5	111	31	3·9	3·3	97
1·0 ,, ...	31	4·1	3·6	13	31	4·6	3·1	282	31	4·7	3·2	294	31	8·4	7·6	109	31	7·6	6·5	104	31	4·0	3·2	92
1·5 ,, ...	31	4·3	3·7	6	31	6·8	5·0	292	31	7·1	5·3	293	31	6·5	4·6	95	31	6·7	4·2	83	31	4·7	3·4	89
2·0 ,, ...	31	4·9	3·9	348	31	8·6	6·4	289	30	9·3	7·2	291	31	6·0	1·7	85	31	5·9	2·3	82	31	4·7	2·6	85
2·5 ,, ...	31	5·0	2·9	330	29	9·9	8·2	285	30	10·6	9·2	288	31	5·6	1·4	76	31	5·4	1·9	57	30	4·8	1·9	77
3·0 ,, ...	31	4·7	2·8	306	28	10·2	9·3	282	29	12·0	10·3	285	31	5·3	0·2	356	31	5·8	1·4	57	29	5·6	0·8	48
4·0 ,, ...	30	6·7	5·1	279	18	10·5	9·5	267	24	15·2	14·5	282	13	6·1	2·2	253	29	7·3	1·9	251	27	7·0	3·0	248
5·0 ,, ...	27	8·1	7·0	264	13	13·9	13·5	260	14	15·8	14·5	277	6	5·5	1·4	289	29	6·5	4·3	258	25	6·9	5·3	258
6·0 ,, ...	23	11·1	9·9	259	8	16·2	14·2	259	11	18·9	17·8	273	1	5·5	5·5	225	29	8·3	6·3	246	25	8·7	6·5	260
7·5 ,, ...	8	16·0	15·5	245	3	21·2	20·7	275	4	21·1	20·1	254					19	12·3	8·4	252	23	11·5	9·0	248
9·0 ,, ...	4	14·7	14·2	243													10	14·1	13·6	241	11	15·5	13·4	237

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

DECEMBER 1950

TATION	JAGDALPUR												JAMSHEDPUR								JHARSUGUDA			
e in I.S.T.	0230				0730				1430				0730				1430				0830			
ght in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
face ...	31	0·3	0·2	113	31	0·2	0·1	8	31	1·1	0·7	15	31	1·2	1·0	282	31	1·4	1·0	304	31	0·6	0·6	10
5 a. g. ...	31	3·7	1·4	71	31	2·9	1·8	45	31	2·4	1·8	22	31	2·8	2·5	278	31	2·3	1·6	304	31	4·4	2·7	44
a.s.l. ...	31	2·2	0·8	70	31	1·7	0·9	44	31	1·7	1·4	23	31	3·5	2·1	330	31	2·5	1·7	306	31	4·6	0·8	26
,, ...	31	4·1	2·1	53	31	4·1	2·8	45	31	2·7	2·0	21	31	4·5	3·8	324	31	3·8	2·8	306	31	4·3	1·1	332
,, ...	31	3·9	2·2	34	31	4·6	3·0	45	31	3·2	1·7	22	31	4·8	3·0	306	31	5·4	5·0	306	31	4·5	1·9	315
,, ...	30	4·9	1·6	359	31	4·9	2·3	16	31	4·0	1·7	5	30	5·9	4·9	304	31	7·5	6·9	301	29	5·8	4·3	309
,, ...	30	4·9	1·8	327	31	4·9	1·7	13	31	4·5	1·5	351	27	7·3	6·4	294	31	9·0	8·5	295	26	7·0	5·8	305
,, ...	27	5·6	2·5	304	31	5·0	1·6	342	31	4·9	1·7	294	23	8·5	7·3	276	31	10·7	10·0	288	25	7·8	6·4	293
,, ...	17	6·4	4·9	256	31	6·5	4·1	271	31	7·7	5·3	274	15	10·7	9·8	259	29	13·9	12·7	277	12	9·3	8·8	271
,, ...	13	9·4	9·2	254	31	8·3	7·5	252	31	8·7	7·9	257	13	13·0	12·1	253	27	16·3	15·6	269				
,, ...	4	9·9	9·7	245	31	10·6	9·2	252	31	11·2	10·0	254	6	17·1	16·2	242	23	19·7	18·8	262				
,, ...	2	9·0	8·7	207	26	16·1	14·8	251	27	15·1	14·1	251					3	25·0	24·5	256				
,, ...					19	18·0	16·9	250	19	17·2	16·7	248					1	32·0	32·0	225				

TATION	JHARSUGUDA								JODHPUR												JABALPUR			
e in I.S.T.	0730				1430				0230				0730				1430				0230			
ght in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ace ...	31	1·3	1·3	19	31	0·5	0·2	310	31	3·6	3·4	44	31	3·0	2·9	44	31	2·2	1·7	43	31	0·9	0·6	110
a. g. ...	31	4·8	4·4	35	31	1·7	0·7	272	31	8·0	7·1	56	31	7·4	7·1	62	26	3·6	2·6	35	27	4·3	2·5	122
a.s.l. ...	31	4·5	1·8	53	31	1·8	0·7	305	31	6·6	5·3	57	31	5·9	5·0	59	26	3·5	2·7	38	27	4·8	2·0	119
,, ...	31	4·6	1·1	8	31	2·4	1·2	310	31	4·2	2·1	63	31	4·3	3·7	28	26	3·5	2·6	30	27	4·4	1·4	221
,, ...	31	4·7	3·0	324	31	4·3	2·7	311	31	3·6	1·3	266	31	4·1	3·0	359	29	3·7	1·4	325	27	5·6	3·6	269
,, ...	31	5·3	3·8	305	31	6·1	4·9	303	31	5·1	3·7	279	31	4·9	3·5	297	31	5·2	3·4	276	27	6·3	4·9	278
,, ...	31	6·0	4·7	300	30	7·4	6·4	294	31	7·2	5·5	273	31	5·9	4·3	274	31	7·6	6·5	267	27	7·5	6·2	280
,, ...	31	7·7	6·5	286	30	8·7	7·8	289	29	8·4	7·1	265	31	8·7	7·8	261	31	10·0	9·1	267	24	8·7	7·5	273
,, ...	30	10·2	8·9	273	30	10·9	9·8	276	5	14·5	13·4	265	29	14·0	13·0	266	31	15·1	14·2	261	3	12·0	11·7	283
,, ...	25	12·8	12·0	260	27	13·7	12·8	266					27	18·3	16·3	266	30	18·9	17·9	260				
,, ...	18	15·7	14·9	257	22	15·9	15·2	265					16	21·1	19·8	267	30	24·0	22·8	259				
,, ...	6	19·7	18·0	253	13	20·3	18·8	265					2	15·0	15·0	270	23	30·0	28·4	260				
,, ...					7	24·8	23·5	251									14	30·6	30·0	262				

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

DECEMBER 1950

STATION	JABALPUR								LUCKNOW				MADHOSAGAR										
Time in I.S.T.	0730				1430				0730				0230				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	1·0	0·9	129	31	1·2	0·4	348	31	1·9	1·2	288	31	1·0	1·5	228	31	0·6	0·2	239	31	1·9	1·0
0·15 a.g. ...	31	4·3	2·6	120	31	2·4	0·8	350	30	5·5	3·2	315	30	4·6	2·4	10	31	4·0	1·7	9	30	3·1	1·8
0·6 a.s.l. ...	31	4·8	2·4	112	31	2·5	0·8	350	29	5·6	3·4	300	29	4·5	2·7	3	30	4·9	2·5	7	29	3·1	1·8
1·0 ,, ...	29	4·9	0·5	210	31	3·0	1·0	277	29	5·6	3·5	291	29	4·0	1·7	318	30	4·5	1·6	325	29	3·2	2·0
1·5 ,, ...	29	5·9	3·2	277	31	4·9	3·1	276	29	6·6	4·8	284	29	5·5	3·9	272	30	5·1	2·9	279	29	5·0	3·8
2·0 ,, ...	29	6·8	5·0	272	31	7·1	5·4	271	29	7·8	6·3	279	28	6·7	5·6	265	30	6·7	5·8	264	29	7·2	6·2
2·5 ,, ...	28	8·0	6·8	278	30	9·2	8·0	276	29	8·9	7·6	277	25	9·0	7·8	261	30	8·7	7·7	258	29	9·8	8·6
3·0 ,, ...	26	8·7	7·6	278	30	10·5	9·3	274	29	9·5	8·5	273	25	11·1	10·3	265	30	10·1	9·3	264	29	11·7	10·3
4·0 ,, ...	25	11·9	10·7	268	29	13·4	12·1	269	24	13·1	12·2	266	6	12·5	12·3	271	25	13·2	12·1	271	25	15·3	13·6
5·0 ,, ...	24	14·9	14·1	267	24	15·8	14·1	271	13	14·0	13·2	262	1	13·0	13·0	270	19	17·8	16·1	268	23	19·7	17·8
6·0 ,, ...	17	17·5	16·2	273	21	19·0	18·0	266	8	18·3	17·0	269					14	21·8	19·3	261	21	23·5	22·2
7·5 ,, ...	8	21·4	20·2	267	14	24·0	22·0	266	3	24·5	21·7	268					9	29·0	26·9	267	13	28·6	26·9
9·0 ,, ...					6	25·1	24·1	270									5	34·1	30·8	263	6	32·5	30·7

STATION	MADRAS												MALEGAON										
Time in I.S.T.	0230				0730				1430				0230				0730				1430		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	2·1	1·6	339	31	2·5	2·1	335	31	5·3	4·8	38	31	2·2	1·9	282	31	1·7	1·5	279	31	1·1	0·2
0·15 a.g. ...	31	5·8	5·3	43	30	5·3	4·7	22	31	7·3	6·8	41	31	3·6	1·9	36	31	3·1	0·7	100	31	2·3	0·5
0·6 a.s.l. ...	31	6·8	6·5	48	30	6·8	6·4	50	31	6·4	6·0	39	31	3·6	1·9	36	31	3·1	0·7	100	31	2·3	0·5
1·0 ,, ...	31	6·5	5·8	51	30	6·7	6·3	57	31	6·2	5·4	41	31	5·3	4·2	81	31	4·7	3·3	126	31	1·9	0·5
1·5 ,, ...	28	6·2	4·5	62	30	7·0	5·6	73	30	6·1	4·4	50	31	4·1	2·8	113	30	4·4	3·0	160	31	2·8	1·2
2·0 ,, ...	23	6·7	4·2	74	27	7·5	5·1	78	28	6·5	4·6	69	29	4·5	3·5	184	29	4·4	3·3	205	31	4·3	3·1
2·5 ,, ...	21	5·6	4·2	80	27	6·5	4·8	80	26	6·6	4·6	70	29	5·9	5·1	209	29	6·1	4·5	230	31	5·4	4·1
3·0 ,, ...	19	4·7	2·8	75	24	5·7	3·9	84	25	5·8	3·4	82	28	6·4	4·9	219	28	6·6	4·6	247	30	7·1	5·6
4·0 ,, ...	11	5·9	0·2	49	22	5·4	1·7	106	25	6·3	1·8	78	20	7·9	6·1	254	28	8·4	6·5	253	27	9·3	8·0
5·0 ,, ...					20	5·5	0·7	156	24	6·0	0·8	117					28	10·8	8·9	260	25	12·3	11·3
6·0 ,, ...					18	7·7	1·4	325	24	7·3	0·9	149					24	13·9	12·3	260	23	15·7	14·5
7·5 ,, ...					12	9·2	7·1	240	20	9·4	2·1	231					15	15·3	14·1	263	17	20·2	19·0
9·0 ,, ...					8	12·3	11·8	231	17	9·1	5·7	225					10	26·5	24·7	269	13	24·5	24·1

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

(Winds upto 9 Km. above sea level

DECEMBER 1950

STATION	MANGALORE												MASULIPATAM											
me in I.S.T.	0230				0730				1430				0230				0730.				1430			
ght in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
face ...	31	3·0	2·8	80	31	3·8	3·8	90	31	2·8	1·8	234	31	2·2	1·7	50	31	2·7	2·4	26	31	3·0	2·7	94
5 a.g. ...	31	3·9	2·5	27	31	6·5	5·9	82	51	3·7	2·7	291	31	5·5	5·0	85	31	6·2	5·8	56	31	3·9	3·2	92
a.s.l. ...	31	4·3	2·2	29	31	5·3	3·0	76	31	2·3	0·7	20	31	6·4	5·6	83	31	6·3	5·4	85	31	4·7	3·4	63
,, ...	31	4·4	2·8	97	31	3·9	2·3	93	31	3·3	3·0	78	31	6·8	5·4	64	31	6·4	5·0	78	31	5·5	4·3	48
,, ...	28	5·8	4·5	104	31	4·4	3·8	111	31	5·3	4·8	82	31	6·8	4·8	65	31	6·4	4·2	70	31	6·5	4·5	54
,, ...	25	5·8	5·5	95	30	4·9	4·0	107	31	6·6	5·7	90	31	6·0	3·7	81	30	6·6	4·1	72	31	6·7	4·0	60
,, ...	15	4·8	3·9	106	30	5·8	4·0	93	30	6·5	4·7	91	27	5·8	3·5	80	29	6·5	4·3	74	31	6·6	3·9	53
,, ...	7	6·0	5·6	120	27	6·0	3·3	86	30	6·5	4·2	88	26	6·2	2·5	78	29	7·0	3·7	80	31	6·4	2·9	70
,, ...					23	6·3	1·9	117	26	6·4	3·1	100	19	5·7	0·9	281	26	5·5	0·9	93	31	5·7	1·0	332
,, ...					18	5·7	0·7	189	24	5·7	0·6	233					26	5·9	1·5	239	31	6·8	2·8	255
,, ...					17	6·5	2·9	239	17	7·7	1·9	270					26	7·2	3·3	252	29	7·3	4·2	239
,, ...					11	9·9	7·0	255	8	11·0	7·6	266					24	9·3	7·0	256	26	10·9	7·5	247
,, ...					6	12·1	11·3	235	6	12·3	11·0	225					20	13·1	11·1	238	23	13·4	11·8	243

STATION	NAGERCOIL												NAGPUR											
me in I.S.T.	0230				0730				1430				0230				0730				1430			
eight in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
face ...	31	3·4	3·0	55	31	2·5	2·2	43	31	4·3	2·6	53	31	1·3	0·9	359	31	1·1	0·8	13	31	1·7	0·7	88
5 a.g. ...	30	6·0	5·5	43	31	5·3	4·8	44	31	6·7	4·9	57	31	5·5	3·2	82	31	4·0	3·1	50	31	2·3	0·8	72
a.s.l. ...	30	6·5	5·8	38	31	6·5	5·8	37	31	5·3	4·0	46	31	5·8	3·7	106	31	4·9	3·0	116	31	2·3	0·7	70
,, ...	30	6·3	5·6	40	30	5·5	4·7	38	31	4·9	3·4	6	31	4·3	2·3	137	31	4·9	2·4	150	31	2·5	0·3	41
,, ...	29	5·9	4·8	50	30	5·6	4·2	56	31	6·4	4·8	27	31	4·6	0·7	281	31	5·0	0·2	276	31	3·6	1·3	313
,, ...	29	4·6	2·1	67	29	5·1	2·6	79	30	6·7	4·9	36	30	4·7	2·3	281	30	5·2	2·0	304	31	4·6	2·5	278
,, ...	24	3·5	1·3	73	27	4·7	2·2	89	27	5·6	3·7	42	30	5·3	3·1	265	29	5·5	2·7	272	31	6·0	4·5	273
,, ...	23	4·1	1·2	85	27	5·2	2·9	87	26	5·6	3·6	63	26	6·9	5·2	268	29	7·0	4·0	270	31	7·7	5·7	271
,, ...	8	4·5	3·1	62	25	5·6	3·8	83	23	6·7	4·9	73	10	8·3	7·2	285	29	8·7	6·4	266	27	10·0	8·4	267
,, ...					23	5·7	4·1	84	20	7·3	6·2	83	1	12·0	12·0	240	25	10·5	8·4	262	27	13·2	10·9	259
,, ...					21	6·6	5·2	91	16	7·9	6·4	101	1	12·0	12·0	245	20	13·1	11·3	255	26	15·1	14·0	262
,, ...					18	7·0	3·2	80	11	10·2	5·7	92					11	16·9	16·1	250	24	19·0	17·8	254
,, ...					14	6·7	3·9	139	7	11·9	6·7	125					4	20·5	18·5	248	19	24·8	23·4	256

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

DECEMBER 1950

STATION	NEW DELHI												POONA											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	2·1	1·7	302	31	2·1	1·9	284	31	3·6	3·2	317	31	0·2	0·2	258	31	0·1	0·1	120	31	1·4	0·7	88
0·15 a. g. ...	29	7·4	6·1	330	31	6·9	5·7	325	31	4·0	3·4	312	31	2·7	1·0	101	31	2·6	1·5	116	31	2·6	0·9	85
0·6 a.s.l. ...	29	6·5	5·3	327	31	6·8	5·5	329	31	3·8	3·0	308	31	1·7	1·0	212	31	1·5	0·6	193	31	2·3	0·9	72
1·0 ,, ...	29	5·6	4·7	319	31	5·8	4·7	320	31	4·6	3·7	309	31	5·2	3·4	93	31	5·3	4·4	113	31	2·9	0·8	126
1·5 ,, ...	29	5·1	3·7	297	31	5·1	3·4	301	30	5·1	2·9	292	31	5·2	4·0	113	31	5·8	4·5	126	31	3·7	1·9	151
2·0 ,, ...	29	5·5	3·7	275	31	4·7	3·1	274	30	5·3	3·2	268	30	5·0	4·2	130	31	5·2	3·6	154	30	3·8	2·0	165
2·5 ,, ...	27	6·1	4·5	271	30	5·7	4·0	270	30	6·3	4·4	261	28	4·2	2·6	172	29	5·3	3·9	183	30	4·4	1·6	191
3·0 ,, ...	25	7·7	6·4	269	30	7·3	5·6	262	29	8·1	6·4	265	25	5·1	2·4	219	29	5·8	3·0	218	29	5·9	2·5	224
4·0 ,, ...	6	12·3	11·9	261	29	12·0	10·5	258	29	12·6	11·1	264	14	6·7	2·8	262	28	7·5	5·0	253	28	7·5	4·5	239
5·0 ,, ...					25	18·5	16·2	263	29	17·1	16·3	269					24	9·0	6·4	251	23	8·2	6·3	250
6·0 ,, ...					23	23·8	21·6	263	28	23·0	21·1	266					21	12·7	9·3	246	21	10·4	9·2	258
7·5 ,, ...					16	29·0	27·1	258	25	31·4	29·4	264					15	14·4	12·9	252	15	13·6	12·2	250
9·0 ,, ...					7	34·2	33·4	255	18	37·6	36·5	267					9	16·3	15·4	234	12	19·3	18·1	247

STATION	PORT BLAIR												RAIPUR											
Time in I.S.T.	0230				0730				1430				0230				0730				1430			
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ...	31	3·9	3·0	79	31	3·4	2·1	64	31	4·0	2·0	70	31	1·0	0·4	53	31	0·9	0·8	49	31	1·0	0·7	342
0·15 a. g ...	29	6·2	4·5	57	31	6·9	4·2	67	30	7·1	4·5	76	31	4·7	2·7	88	31	4·0	2·1	65	31	2·1	1·1	3
0·6 a ...	26	6·8	5·1	66	31	8·3	4·5	83	30	7·5	4·5	76	31	4·2	2·3	89	31	4·3	2·2	93	31	2·2	1·2	2
1·0 ,, ...	21	5·3	3·9	68	29	7·1	4·3	94	28	6·3	3·7	77	31	3·6	0·9	54	31	3·6	1·3	75	31	2·1	1·2	354
1·5 ,, ...	16	4·7	2·6	97	26	7·5	4·4	114	26	6·2	3·0	103	31	4·1	2·1	328	31	4·4	2·1	342	31	3·7	1·7	327
2·0 ,, ...	9	7·4	5·4	92	21	7·5	3·1	117	22	6·2	3·1	84	31	5·2	3·4	308	31	5·6	3·1	319	31	4·9	3·1	299
2·5 ,, ...	9	5·8	4·7	102	19	6·7	3·2	100	21	6·3	3·4	80	28	5·5	3·9	284	31	5·5	3·8	294	30	6·3	4·3	294
3·0 ,, ...	1	3·5	3·5	45	16	5·6	4·0	78	19	6·4	3·5	75	27	6·9	5·2	281	31	6·5	4·8	288	30	7·2	5·3	285
4·0 ,, ...	1	8·5	8·5	65	12	6·8	4·7	74	17	6·1	4·5	81	4	6·4	6·1	271	31	9·4	7·8	273	30	10·2	8·4	274
5·0 ,, ...					10	6·9	5·6	91	17	6·8	5·2	96	2	9·7	9·5	251	31	11·7	10·9	258	29	12·5	11·5	262
6·0 ,, ...					8	7·1	5·9	100	16	8·1	6·7	100	1	11·5	11·5	240	30	14·9	14·1	260	28	15·4	14·6	255
7·5 ,, ...					6	7·0	3·5	123	13	6·0	4·5	120					22	18·1	17·2	254	22	20·0	18·6	260
9·0 ,, ...					5	5·9	4·5	201	12	6·9	3·7	170					12	23·1	22·5	253	17	22·3	21·5	250

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

DECEMBER 1950

TATION	TEZPUR												TIRUCHIRAPALLI											
e in I.S.T.	0230				0730				1430				0230				0730				1430			
ght in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ce ...	31	0·5	0·4	74	31	0·7	0·6	60	31	0·6	0·5	71	31	2·1	2·0	31	31	2·0	1·8	7	31	3·3	3·2	51
a.g. ...	30	3·9	3·0	77	30	3·5	3·0	73	31	2·4	1·6	83	30	8·0	7·8	39	31	5·6	5·3	25	31	5·1	4·7	53
.s l. ...	29	4·3	3·4	88	30	4·5	3·7	88	31	3·0	1·8	89	30	9·8	9·3	48	31	8·5	8·0	42	30	5·6	5·2	48
,, ...	28	4·7	1·4	84	30	4·6	3·1	83	31	3·5	1·3	121	30	8·1	6·9	52	30	7·4	6·6	49	30	5·9	5·4	42
,, ...	26	4·4	0·7	85	29	4·5	1·7	85	30	5·1	1·9	187	28	6·6	5·1	55	28	5·7	4·9	58	28	6·0	5·0	44
,, ...	23	5·0	0·6	127	28	4·8	1·2	97	29	5·7	1·6	190	27	5·9	3·3	62	25	5·9	4·2	67	27	5·5	3·9	48
,, ...	20	5·1	1·2	82	26	5·5	1·0	72	29	6·0	1·5	254	22	6·1	4·0	75	24	5·9	4·0	72	22	5·7	3·2	64
,, ...	15	4·9	0·8	295	25	6·3	2·8	286	28	7·5	4·4	274	20	6·3	4·2	72	23	6·0	4·3	75	21	6·6	3·7	57
,, ...	7	10·1	8·8	263	20	15·3	14·5	276	21	16·6	15·7	271	1	10·0	10·0	115	21	6·4	4·1	87	21	6·7	3·3	75
,, ...					10	18·5	17·7	273	18	22·8	21·2	269					19	6·6	4·0	98	22	6·8	3·8	83
,, ...					8	21·6	20·5	278	11	23·2	21·1	268					18	6·9	3·1	111	21	7·3	4·0	101
,, ...					5	29·4	27·2	269	9	34·6	31·6	272					7	9·9	1·6	157	18	8·7	2·6	89
,, ...					1	26·0	36·0	295	2	43·3	40·3	285					7	7·6	6·3	239	14	7·7	4·4	172

TATION	TRIVANDRUM				UDAIPUR												VENGURLA							
in I.S.T.	0730				0230				0730				1430				0230				0730			
ght in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ice ...	31	1·0	0·8	52	31	0·2	0·2	315	31	0·2	0·2	322	31	1·5	0·7	73	31	1·1	1·0	17	31	0·9	0·8	35
a.g. ...	31	2·7	1·9	58	31	3·1	2·6	29	30	2·7	2·4	12	30	2·5	1·2	55	31	4·7	3·6	33	31	3·6	2·8	67
a.s.l. ...	30	2·6	1·3	84	...	...	...	...	..	...	...	...	...	...	...	...	31	4·8	2·2	45	31	4·7	3·0	97
,, ...	30	2·9	1·6	57	31	3·5	2·1	63	31	3·7	2·4	65	30	2·2	0·9	49	31	4·9	2·8	101	31	5·5	3·8	97
,, ...	29	3·3	1·6	58	30	3·9	1·9	205	31	3·8	0·4	195	31	3·1	1·4	291	31	6·2	5·2	106	31	5·3	4·1	106
,, ...	28	3·6	1·6	95	31	5·2	4·3	247	31	5·1	3·9	254	31	5·8	4·9	265	31	5·7	5·0	110	31	5·1	3·5	117
,, ...	26	4·0	2·0	89	31	7·6	6·8	259	31	7·4	6·7	259	31	8·5	7·8	256	29	5·1	3·5	123	31	5·1	2·4	137
,, ...	26	4·6	2·5	85	31	9·5	8·6	261	31	9·2	8·4	260	31	10·6	9·6	258	25	5·5	2·3	154	31	6·1	1·8	157
,, ...	23	5·6	4·4	86	6	13·6	12·3	289	30	13·2	12·0	256	31	14·2	13·1	262	20	6·8	2·1	264	31	7·1	1·0	245
,, ...	22	5·4	3·8	91					22	16·4	15·0	257	30	18·1	17·3	263	9	5·3	1·5	228	31	7·1	3·7	259
,, ...	18	8·0	5·0	101					14	18·0	16·8	262	27	21·1	20·4	265	4	7·5	3·8	236	31	9·2	5·9	249
,, ...	15	9·7	5·6	107					2	20·7	20·0	256	17	23·6	22·8	264					29	13·2	8·7	257
,, ...	11	7·7	4·0	147									6	26·7	25·0	272					15	13·7	10·8	244

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9 Km. above sea level

DECEMBER 1950

STATION	VENGURLA				VERAVAL												VISAKHAPATNAM						
Time in I.S.T.	1430				0230				0730				1430				0230				0730		
Height in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ...	31	2·7	2·5	258	31	4·4	3·9	14	31	3·2	3·0	39	31	3·7	1·6	279	31	1·0	0·7	327	31	1·3	0·9
0·15 a. g. ...	31	3·4	3·1	254	31	10·8	9·9	30	31	9·5	8·9	34	30	4·7	1·9	294	31	2·7	2·1	49	31	2·7	2·3
0·6 a.s.l. ...	31	2·4	1·2	57	31	6·5	5·1	39	31	4·5	3·7	21	31	3·7	2·6	9	31	3·8	3·1	66	31	4·3	3·8
1·0 ,, ...	31	4·0	3·1	77	31	3·4	1·5	31	31	3·1	2·1	5	31	3·1	2·4	3	28	4·3	3·6	52	31	4·7	4·1
1·5 ,, ...	31	5·7	4·6	85	31	3·8	1·2	322	31	3·5	0·7	256	30	3·5	1·3	317	28	4·8	3·5	56	31	5·5	4·3
2·0 ,, ...	31	5·6	3·9	98	31	4·4	1·4	274	31	4·0	2·1	226	31	4·3	2·4	262	28	5·3	2·7	58	31	5·5	3·5
2·5 ,, ...	31	5·0	2·8	109	31	5·0	2·7	243	31	5·0	3·8	245	31	5·5	4·2	254	21	5·1	1·9	39	30	5·1	2·6
3·0 ,, ...	31	5·4	1·1	146	28	6·2	4·2	252	30	6·5	5·2	249	31	6·7	5·8	252	20	4·9	1·7	345	29	4·4	1·5
4·0 ,, ...	31	6·9	1·9	254	13	8·7	7·2	250	31	9·1	7·7	253	31	9·8	8·3	256	7	7·3	6·5	271	28	4·6	1·0
5·0 ,, ...	30	6·9	4·1	262					31	11·8	10·7	259	31	12·6	11·3	265					25	6·2	3·5
6·0 ,, ...	30	9·4	6·9	254					22	15·7	14·9	258	31	15·3	14·0	264					19	7·4	3·9
7·5 ,, ...	26	13·7	10·9	257					9	22·4	20·3	262	24	19·9	18·5	261					9	11·5	9·6
9·0 ,, ...	23	15·1	14·0	240					5	23·5	23·5	256	18	24·2	22·7	263					5	9·6	8·4

STATION	VISAKHAPATNAM			
Time in I.S.T.	1430			
Height in Km.	n.	V	v	D
Surface ...	31	4·2	3·3	101
0·15 a. g. ...	31	5·2	3·9	110
0·6 a.s.l. ...	31	3·5	2·9	54
1·0 ,, ...	31	4·0	3·5	25
1·5 ,, ...	31	4·8	3·6	29
2·0 ,, ...	31	5·2	3·5	30
2·5 ,, ...	31	5·2	2·4	20
3·0 ,, ...	31	5·1	1·6	10
4·0 ,, ...	31	5·8	2·3	275
5·0 ,, ...	31	6·9	5·1	255
6·0 ,, ...	29	9·7	8·3	248
7·5 ,, ...	16	13·5	10·9	249
9·0 ,, ...	19	19·0	17·8	256

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds at and above 10 Km. above sea level

DECEMBER 1950

Height in Km.	n	V	v	D
		AHMEDABAD		
10	9	31·4	29·8	253
11	7	35·1	34·3	242
12	3	33·8	33·3	256
13	1	33·0	33·0	270
		ALLAHABAD		
10	6	37·9	35·2	253
11	1	61·5	61·5	255
12	1	69·0	69·0	255
		ANANTAPUR		
10	24	12·8	10·3	233
11	16	14·9	13·9	226
12	9	14·6	12·1	212
13	6	13·9	11·6	215
14	3	11·3	10·0	198
15	2	16·0	16·0	213
		ASANSOL		
10	1	41·5	41·5	250
11	1	39·5	39·5	240
12	1	36·5	36·5	250
		BANGALORE		
10	32	13·1	10·9	205
11	13	12·3	9·7	207
12	9	11·7	7·2	210
13	7	10·4	6·1	217
14	5	7·3	4·5	260
15	3	13·7	6·7	223
16	2	19·7	14·3	250
17	1	9·0	9·0	125
18	1	16·0	16·0	125
		BAREILLY		
10	1	33·0	33·0	255

Height in Km.	n	V	v	D
		BHOPAL		
10	6	34·8	34·2	245
11	4	39·6	39·5	247
12	2	32·5	32·5	253
13	1	42·0	42·0	250
		BHUJ		
10	23	33·0	31·5	261
11	5	33·0	32·5	255
12	2	40·0	40·0	257
		BOMBAY		
10	30	26·9	25·5	249
11	10	26·9	26·0	253
12	5	26·4	25·6	249
13	5	28·0	27·5	241
14	2	25·0	24·9	239
15	1	14·5	14·5	240
16	1	9·0	9·0	225
17	1	7·0	7·0	250
18	1	9·0	9·0	320
		CALCUTTA		
10	2	39·3	39·3	255
11	1	30·0	30·0	260
		COCHIN (Willingdon Island)		
10	14	11·3	8 0	186
11	12	12·7	9·2	173
12	10	12·4	11·2	164
13	9	13·7	7·6	174
14	6	9·4	2·9	140
15	4	8·0	6·2	132
16	4	9·9	9·1	147
17	3	7·3	6·6	105
18	3	4·3	4·1	53
19	2	6·7	3·1	178
		COOCHBEHAR		
10	1	33·0	33·0	305
		CUTTACK		
10	22	27·4	25·8	254
11	10	29·6	26·3	258
12	9	35·1	32·6	253
13	9	35·1	33·8	242
14	8	27·4	26·1	242

Height in Km.	n	V	v	D
		CUTTACK *(Contd.)*		
15	7	24·4	23·3	243
16	7	19·7	18·3	245
17	7	15·5	14·1	244
18	4	12·4	12·1	249
19	4	18·0	18·0	243
20	3	22·5	19·1	240
21	1	7·5	7·5	345
22	1	6·0	6·0	90
23	1	11·0	11·0	360
24	1	C A L M		
25	1	4·5	4·5	65
		DEOLALI		
10	7	26·3	25·9	242
11	6	29·1	28·7	242
12	2	31·5	29·7	231
13	1	32·0	32·0	215
14	1	26·0	26·0	240
		DIBRUGARH		
10	4	50·5	50·0	272
11	1	56·0	56·0	265
		GADAG		
10	24	15·4	14·0	241
11	10	17·2	16·4	228
12	4	19·2	18·7	227
13	2	14·5	14·5	225
14	2	14·3	14·3	238
15	1	22·0	22·0	265
		GOPALPUR		
10	8	14·3	13·4	253
11	2	19·0	18·0	249
12	1	26·0	26·0	215
13	1	18·0	18·0	235
14	1	9·5	9·5	250
		HYDERABAD (Dn.)		
10	11	15·0	12·7	236
11	2	15·0	15·0	235
		JAGDALPUR		
10	30	20·9	20·0	247
11	16	20·2	18·9	237
12	4	21·7	21·5	237
13	3	23·0	22·9	232
14	1	21·5	21·5	225
15	1	18·0	18·0	245

Height in Km.	n	V	v	D
		JHARSUGUDA		
10	3	31·0	31·0	241
11	2	30·5	30·5	235
		JODHPUR		
10	9	37·2	36·3	258
11	5	40·5	37·4	251
12	2	42·5	42·5	257
13	1	32·0	32·0	255
14	1	35·0	35·0	255
15	1	45·0	45·0	255
		JABALPUR		
10	1	31·0	31·0	280
		MADHOSAGAR		
10	9	35·6	35·0	250
11	5	37·0	36·1	241
12	4	54·3	53·1	237
13	3	64·5	62·1	233
14	1	105·0	105·0	235
		MADRAS		
10	17	11·8	10·6	218
11	10	14·0	11·7	218
12	6	15·4	12·6	204
13	5	16·5	13·0	198
14	5	15·7	13·6	217
15	3	14·7	12·2	207
16	1	6·5	6·5	195
17	1	12·0	12·0	225
		MALEGAON		
10	18	32·8	28·8	253
11	3	25·8	25·7	257
		MANGALORE		
10	11	14·0	12·4	228
11	3	12·8	11·5	196
12	1	11·0	11·0	215
		MASULIPATAM		
10	36	16·3	14·4	241
11	18	21·5	19·7	235
12	14	23·3	21·4	240
13	12	24·0	21·9	237
14	9	22·7	20·5	240
15	7	24·5	23·1	255
16	6	19·7	18·1	234
17	5	18·8	18·1	247

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds at and above 10 Km. above sea level

DECEMBER 1950

Height in Km.	n	V	v	D
	MASULIPATAM *(Contd.)*			
18	2	20·5	19·9	228
19	2	22·7	22·7	233
20	2	14·3	14·1	259
21	2	17·3	17·3	240
22	2	17·0	15·3	226
23	2	18·3	13·7	225
24	1	23·0	23·0	265
25	1	22·0	22·0	270
	NAGERCOIL			
10	18	9·4	6·1	145
11	4	9·1	1·7	166
12	3	11·5	5·5	132
	NAGPUR			
10	18	28·2	26·6	251
11	12	28·0	27·0	250
12	6	30·8	30·5	247
13	4	37·6	37·3	238
14	2	31·3	30·9	237
15	1	33·0	33·0	230
	NEW DELHI			
10	16	38·5	36·5	262
11	9	42·6	41·6	252
12	5	46·5	45·0	248
13	2	51·0	50·0	234
14	1	59·5	59·5	245
	POONA			
10	13	17·4	16·7	230
11	5	21·3	21·0	232
12	5	21·5	21·0	242
13	3	26·0	25·7	226
14	1	29·0	29·0	250
	PORT BLAIR			
10	15	7·6	5·7	174
11	13	9·3	7·8	187
12	4	10·3	3·9	177
13	4	10·3	3·9	177
14	4	12·5	7·7	174
15	2	20·3	19·8	145
16	1	3·0	3·0	235
17	1	6·0	6·0	105
	RAIPUR			
10	27	25·3	24·4	254
11	5	28·2	27·6	240
12	3	29·5	28·9	244
13	2	34·3	34·2	237
14	1	34·5	34·5	245
	TEZPUR			
10	1	38·0	38·0	295
11	1	54·5	54·5	275
12	1	66·5	66·5	275
	TIRUCHIRAPALLI			
10	15	8·4	5·8	192
11	2	14·3	13·4	142
12	1	16·0	16·0	160
	TRIVANDRUM			
10	9	10·2	7·2	158
11	3	11·3	6·8	186
12	2	8·0	5·3	97
13	1	9·0	9·0	90
14	1	10·0	10·0	110
	UDAIPUR			
10	3	22·5	20·8	265
	VENGURLA			
10	26	16·9	15·3	236
11	15	19·6	17·8	230
12	11	18·6	17·1	226
13	4	15·9	15·7	232
	VERAVAL			
10	17	26·8	25·2	259
11	8	44·3	22·2	59
12	6	28·7	27·8	258
13	3	27·5	26·3	265
14	2	35·0	35·0	275
15	2	35·5	35·5	273
16	2	40·5	39·9	273
17	1	50·0	50·0	275
18	1	43·0	43·0	275
19	1	69·0	69·0	275
	VISAKHAPATNAM			
10	19	19·6	17·9	242
11	12	22·4	21·8	244
12	11	21·8	20·0	235
13	9	24·6	23·2	239
14	5	19·3	18·5	236
15	4	21·2	19·6	220
16	3	31·5	27·2	242
17	2	22·7	22·4	228

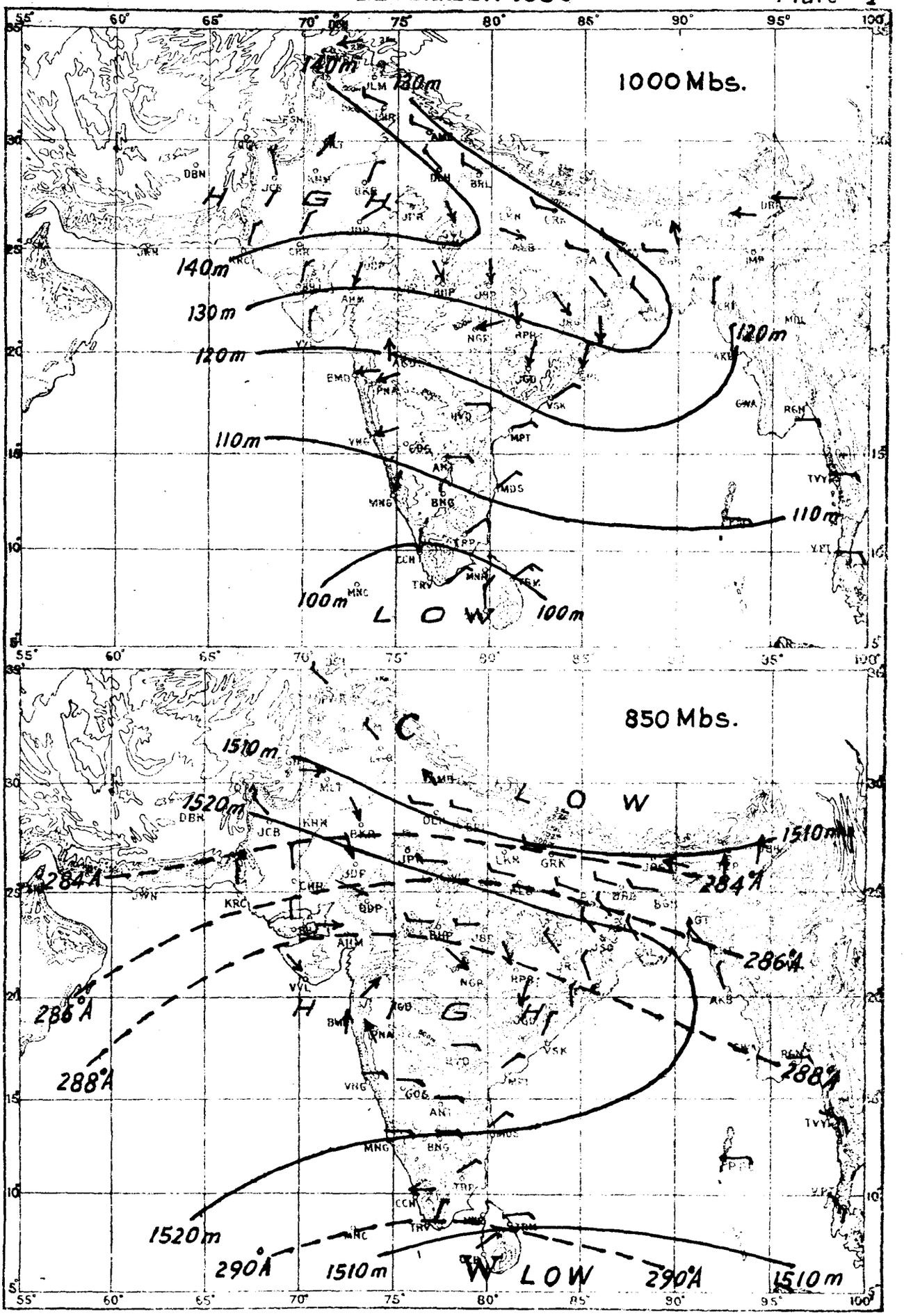
Height in Km.	n	V	v	D
	VISAKHAPATNAM *(Contd.)*			

Height in Km.	n	V	v	D

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

DECEMBER 1950

Plate I



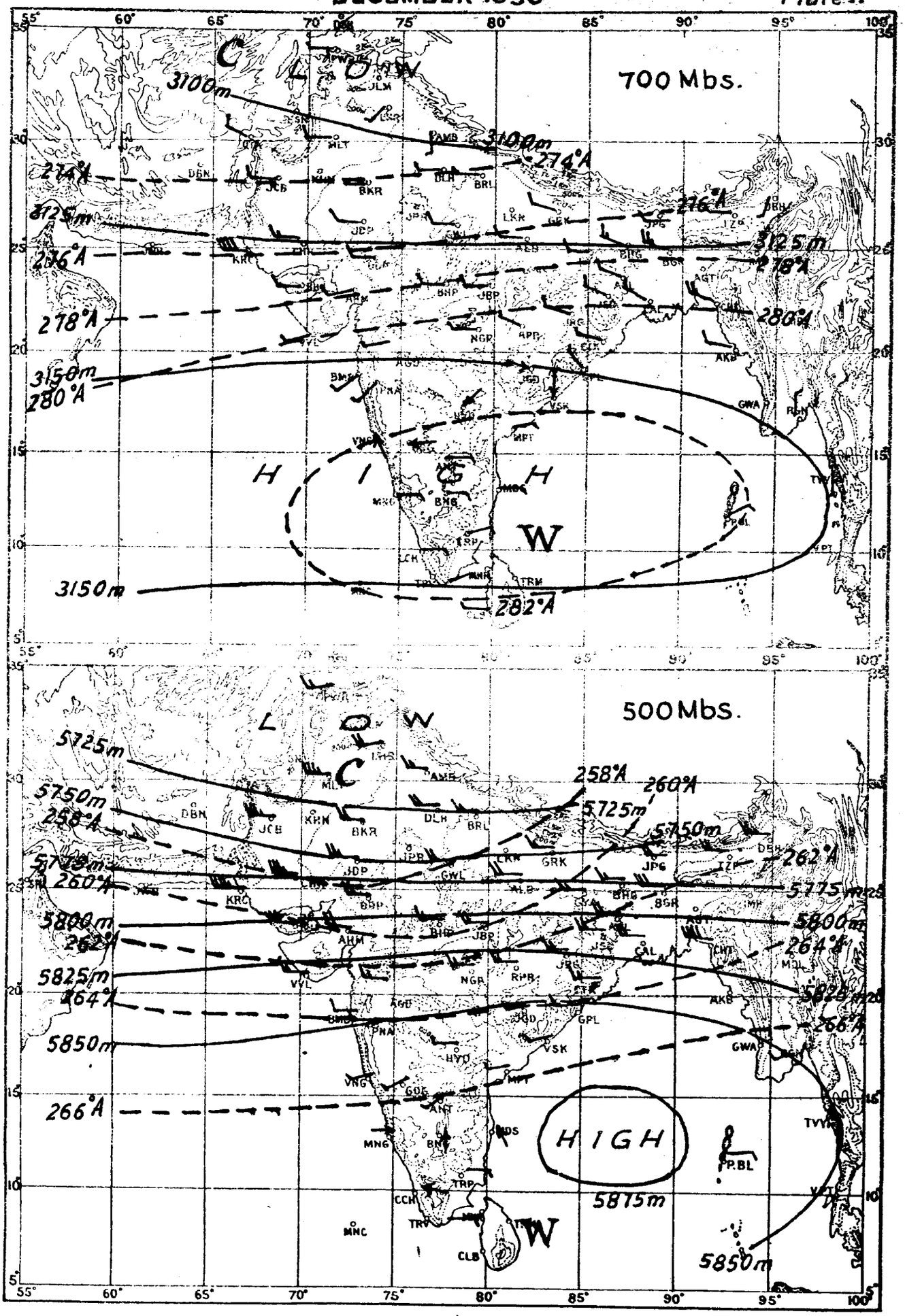
RESULTANT WIND ——\ = 5 Knots; ——\ = 10 Knots, ——◣ = 50 Knots.

------ Isotherms in degrees absolute. ——— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS.

DECEMBER 1950

Plate II



RESULTANT WIND ——\ = 5 Knots; ——\ = 10 Knots, ——◣ = 50 Knots.

- - - - - - Isotherms in degrees absolute. ——— Contours in geopotential metres.

G.P.Z. P. POONA, 53.